DOCTORAL DISSERTATION

The Middle- and Neo-Assyrian pottery in Iraqi Kurdistan (1200-600 B.C)

Volume I

Abdullah Bakr Othman

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Eötvös Loránd University
Institute of Archaeological Sciences

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Volume I

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Abdullah Bakr Othman

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Preface

The topic of this dissertation and the study which it summarizes is a rather interesting one, for it presents a catalogue of the Middle and Neo-Assyrian ceramics from two archaeological sites not publicized before, Tell Kilik Misik and the vaulted tomb of Sheikh Choli, and sheds a new light on the Assyrian pottery from the Erbil region in Kurdistan, Iraq in the gives periods as well.

The excavation at Kilik Mishik was started in 2010 by a French team with the leadership of Professors Olivier Rouault from the University of Lumiere Lyon and Maria Grazia from EPHE, as well as the Salahaddin University under the supervision of Dr. Yusuf Khalaf Alfahdawi. Between 2011 and 2013, the site was excavated by Salahaddin University as a training excavation for the students from the Department of Archaeology led by Noaman Ibrahim Jumha. The composer of this thesis also had the chance to attend the excavations at the site in 2012 and 2013 as a principal team member and was responsible for the study of the pottery. The project was closed in 2014 due to financial reasons caused by a deterioration of relations between the KRG government and Baghdad.

The second site, the Sheikhi Choli vaulted tomb, was found on the 18th of March in 2017 during the construction process of a commercial building in the centre of the city of Erbil. The Erbil Directorate of Antiquities and Heritage team has excavated the tomb and gave the permission to the author of this thesis to study the ceramics. The ceramics came from primary context, and were found in situ and most of them were complete. The methodology used consists of various analyses which provided different information about the traits of the pottery.

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1. Introduction

There have been several historical and archaeological factors which have led us to the objective of this study. A study which has encompassed some of the oldest historical sites in Iraqi Kurdistan; in a country divided by Iraq, Turkey, Iran, Syria and Armenia since the fall of the Ottoman Empire at the end of World War One.

The east of the Tigris is often considered the boundary which delineates Northern Iraq with the Zagros Mountains forming a natural wall separating the Mesopotamian and Elamite worlds. Since the earliest days, many caves and villages were inhabited across the region; perhaps most famously the Palaeolithic site of Shanidar Cave, where excavations have revealed occupation dating from 65,000 B.C. The Mesolithic site of Zawi Cami is also significant when discussing the long history of settlements of the area, which proved to have so many prehistoric sites in the surrounding valleys and plains. Much later the Lullubian, Gutian, Subarian and Urartian civilizations established their kingdoms in the territory which provided a contemporary northern enemy for the Akkadian and Assyrian empires.

This region is known for its vast amount of various ceramics, a rich heritage which includes bowls, jars and pots from periods extending back into the deep prehistory all the way through to the medieval era. Although some of these are quite well preserved, many remain in a bad condition. Unfortunately, based on our research, a comprehensive and extensive study of ceramic objects of this area has never been undertaken.

This study will focus on ceramics dating from the second millennium to the first millennium B.C. The choice of such a long period stems from the fact that for most ceramics of Kurdistan no exact descriptions are available, which is one of the main problems encountered in this thesis.

The research on the north Mesopotamian ceramics and the Tigris region is of both historical and archaeological interest, since there was a great wealth of ceramics dating from the 2nd and 1st millenniums B.C, but they hardly remain till today. During the period of 1200-900 B.C. the north of Mesopotamia was dominated by the Middle Assyrian Empire and the south by several Babylonian kingdoms. The two empires were named after their capitals, Assur as the capital of Assyria and of course, Babylon.

The north was a vast area that saw the rise of many great states, all of which bordered the lands belonging to the Mitannian, Hittites, and later the Urartian. This

region, since ancient times, is considered to be the cradle of humanity; and research highlights its importance in Mesopotamian culture, especially in the religious field.

The ceramics found in this region extend from the Neolithic period to the present day. We studied purely those ceramics of the Middle and Neo-Assyrian empires. The pottery of these periods is very important because it exerted a great deal of influence on other cultures. The precise dating of the pottery from certain periods faces difficulties, due to the lack of historical background. In this study, through a scientific approach, Middle and Neo-Assyrian ceramics in Mesopotamia were examined by looking at their forms, raw materials, fabric and techniques as well as its internal and external diffusion.

The subject of this dissertation is the study of all the ceramics discovered at Tell Kilik Mishik during four seasons of excavations; with the Sheikhi Choli vaulted tomb and Grdi Tle used as comparison. Both Tell Kilik Mishik and the Sheikhi Choli vaulted tomb is located within the perimeters of the modern city of Erbil, and the site of Grd-I Tle as an Assyrian border settlement lies approximately 100 km from the city. This dissertation focuses on the unpublished material and due to the fact that most of the vessels are complete, it has provided comprehensive information regarding the formation techniques used, production and other key factors.

The dissertation is first giving a general overlook on the history of Iraqi Kurdistan under the Middle and Neo-Assyrian empires and the main point of the research history and literature of the topic. It is followed by the explanation of the archaeological contexts of the ceramics and the methodology which has been used for collecting all the significant data. Chapter 6 and 7 incorporate the typology, main morphological forms and the technical aspects of pottery production. And finally, the last chapters clarify the function and use and carry out the comparison with various sites.

The importance of this dissertation lies in the study of the unpublished ceramics. The pottery from the Sheikhi Choli vaulted tomb is unique due to the fact that it is the first vaulted grave excavated in this region where such a great number of complete vessels were found. A similar grave was found prior in Tell Kilik Mishik, but it did not provide a big amount of pottery. Both sites have considerable archaeological significance in the city of Erbil and lay only 5 km away from each other.

This study concentrates on the manufacturing, inclusions, forming, firing process, function and general aspects of the Middle and Neo-Assyrian ceramics from Tell Kilik Mishik and Sheikhi Choli vaulted tomb. The research will discuss the production of the pottery that includes shaping, decoration techniques, firing and tools used in production. Moreover, we will examine the function and use of the pottery. In addition, it presents the ceramics from burials and kilns with performance characteristics and trace of use.

This study shall answer the following questions:

1. Which kind of clay was used to manufacture the ceramics?
2. How were the ceramics tempered and how were they prepared?
3. How were they formed (coil-build techniques and different ways)?
4. How were they fired and what kind of kiln was used?
5. Is there any connection between the ceramics from the two sites and with other sites in this region?
6. Are the ceramics from both sites produced in a domestic way or are they products of a local tradition?

The main aim is to create he first thorough work on the Middle and Neo-Assyrian ceramics from Iraqi-Kurdistan.

Finally, it is important to shed light on the archaeological relevance of Iraqi-Kurdistan, which has been ignored for many – mostly political – reasons in the past thirty years. From 1985 the ministry of external affairs of Iraq has stopped the archaeological missions in Iraqi-Kurdistan, which had a major impact on the Archaeological research in this region. This situation has started to change in 2010 with the excavations at Tell Kilik Mishik with the participation of Kurdish and French Archaeologists.

All the sherds have been drawn, taken photo of, registered, described, sorted etc. by the author of this thesis. The work had to ben started from zero as it was not previously studied, and the sites were rather new discoveries with few earlier publications.

2. History of Iraqi Kurdistan under the Middle- and Neo-Assyrian empires

2.1. Cuneiform sources

The north of Iraq (Iraqi Kurdistan) is essentially the heartland of the two Assyrian empires from the mid-second to the mid-first millennium B.C.

The most important provinces in northern Iraq during these periods are: Arbela[1] (modern Erbil) in the east, Kilizu (Qasr Shamamok)[2] south west from Arbela, Assur (modern Qala'at Sharqat)[3] to the south, Kalhu (modern Nimrud)[4] to south-east and located between the Upper Zab and Tigris rivers, Dur-Sharrukin (modern Khorsabad)[5] to north from Mosul and Nineveh (modern Mosul with the ruin mounds Kuyunjik and Nebi Yunus[6]) in the middle of the heartland, Arzuhina[7] (modern Tell Chemchemal) in the east, about 30 km from Kirkuk, Arrapḫa[8] (the citadel of Kirkuk), Nuzi (Tell Yorgan Tepe[9]) south of Kirkuk, Kurukhani (Tell AL-Fakhar) south of Nuzi and Tell Ali on the right bank of the Lesser Zab which is roughly 42 km from Kirkuk[10]. (Fig. 1)

[1] RADNER 2011, 321
[2] FURLANI 1934A, 90.
[3] DITTMANN 1992, 307.
[4] CURTIS 1997, 141-144.
[5] LOUD - ALTMAN 1938, 9
[6] MALLOWAN 1933, 71
[7] GRAYSON 1993, 35
[8] GELB 1944, 3
[9] STARR 1939, 29
[10] AL-KHALESI 1977, 2.

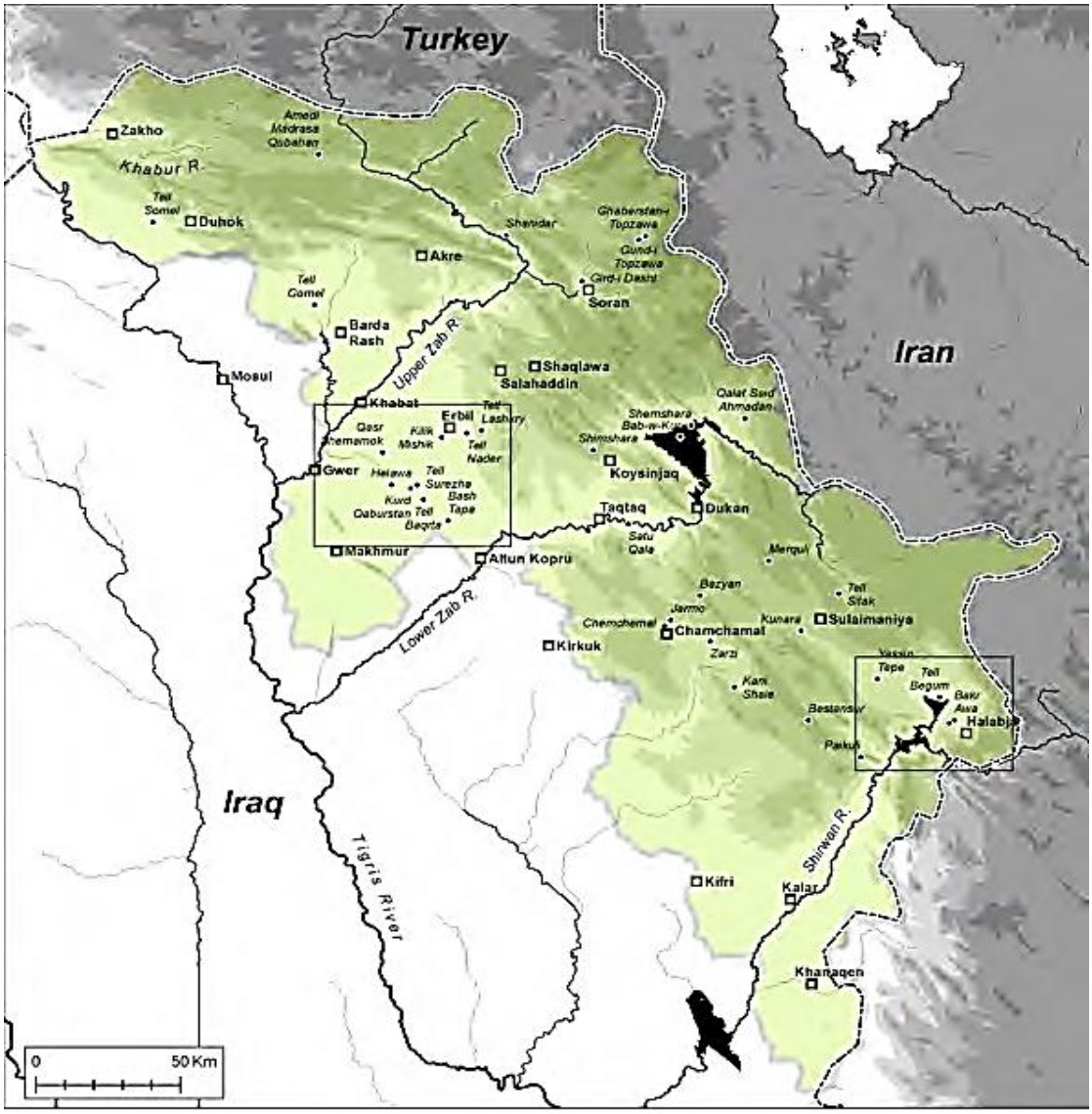

Fig. 1: The Iraqi-Kurdistan region, after. UR 2017, fig.7

These provinces played important roles during this period; the Assyrian capital cities were founded on the Tigris, and the important cities, in the case of Erbil, close to the Greater Zab. The Assyrians dominated these cities which of course all were located on the main roads going to the north and to the east from Arbela to the Zagros mountain ranges and Iran.

The Assyrian kings used these cities for their cultural and political activities, such as military campaigns and religious construction programs, like building or rebuilding temples and celebrating festivals.

According to the archaeological remains and excavations, its proven that Iraqi Kurdistan or the eastern districts of the Middle Assyrian Empire were occupied by the Assyrians who used these settlements as the frontier with the Babylonian Empire, and

the other tribes or kingdoms from the Zagros Mountains such as the Lullubian, Gutian and etc.[11]

The old and new excavations – which are presented in chapter 9 – show the Middle and Neo-Assyrian settlements in Iraqi Kurdistan and prove that this region was dominated by and provided agricultural production to the Assyrians capitals.

The recent excavation at Grid Bassetki (the ancient Mardaman) has provided us with major information about the Middle Assyrian period in this region, especially with the discovery of 200 inscribed tablets.[12] The new excavations at Tell Qasr Shamamok (ancient Kilizu) also unearthed interesting data about the history of the region of Erbil.[13]

The oldest documents which attest to this region can be found in the archive of Nuzi, a city which must have been burned and destroyed by the Assyrians.[14] During the reign of Adad-nirārī I (1295-1264 BC) the province of Arrapha in the region of modern Kirkuk was a major flash point in the conflict between Assyria and Babylon. Following the attack on Babylon by Adad-nirārī I, this region became dominated by the Assyrians and **Adad- nirārī I** (1295-1264 BC) put new territorial regulation on Babylon. After Adad-Nirari I, King **Tukulti-Ninurta I** (1233-1197) mentioned Arrapḫa in the list of conquered cities[15], mountains and valleys located east from Assur.[16]

The campaign of **Adad-nirārī I** to reach the Zagros mountains meant that he took his forces across the plain of Rania and took the road between Tell Basmussian and Tell Ali, on the right bank of Lesser Zab, which is about 30 km far from Assur in the east [17].

On the other hand, north-east from Assur, the big cities like Arbela (Erbil), and Kilizu (Tell Qasr Shamamok), gave the tribute regularly to the Assur temple during the reign of **Enlil-kudurri-uṣur** based on the last inscription which has been published by Helmut Freydank.[18]

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[11] AHMAD 2012, 68, 75.
[12] RIJKHOEK 2018, 1.
[13] MASETTI-ROUAULT, M. G.- CALINI, I. 2016, 209-218
[14] LYON 1995, 83.
[15] GRAYSON 1987, 273. (RIMA 1, A.0 78.23, 79)
[16] KERTAI 2009, 34-35.
[17] LAESSOE 1959, 18.
[18] FREYDANK 2006, 15, TEXT N^{O} 27.

The king Salmanassar I led his first campaign against Urartu which was mentioned in his royal inscriptions.[19]

In the other record from the archive of **Ninurta-tukulti-Aššur** (1135 BC) one can read that the cities of the east Tigris as Arbela, Arrapha and Arzuhina (modern Tell Chemchemal) gave the gift to Assur.[20] The Assyrian chronicle mentions that the Babylonian king **Ninurta-nadin-šumāti** passed Arbail during the region of the Assyrian king Aššur-rēs-iši (1132-1115).[21]

The king **Tighlat-pileser I** (1117-1077 BC) fought a Babylonian army twice and he recaptured the lost cities at the border alongside the bank of the lower Zab.[22]

The information regarding this region is somewhat lacking the details about the frontier of the neighbouring regions. However, it is the most important region for the Assyrian empire. The Assyrian kings tried to keep their borders strong against their enemies. For this reason, Iraqi Kurdistan, or the east of the Tigris, is the major conflict area between different states with its incredibly fertile areas suitable for agriculture.

The campaigns of **Adad-nirārī II in 911-891 B.C**. took almost the entire lands from Elam in the east to the Mediterranean in the west and extending to Egypt in the south-west under control of the Neo-Assyrian kings. Therefore, the regions located in the east of the empire, from the Zagros Mountains to the Tigris, and the region between the upper Zab and the Lower Zab got great significance for the Assyrian empire.[23]

The second king of the Neo-Assyrian period was **Tukulti-Ninurta II** (891-884 BC), who has mentioned this region during his campaigns several times, for example when he took the east of the Tigris such as the region of Dohuk and turned his campaign towards the mountains located in the east of Arbail such as the mountain Išrun[24] which is probably the mountain Asngaran near the city of Dukan.[25]

The Assyrian kings have not stopped their campaigns over Iraqi-Kurdistan and marched here again during the reign of the king **Ashurnasirpal II** (884-859 BC) who is considered to be the founder of the Neo-Assyrian Empire. He mentioned also the region located to the east of Erbil – which includes the region of the Upper and Lower

[19] KERTAI 2009, 32.
[20] WEIDNER 1935-1936, 20.
[21] GLASSNER 1993, 177. KERTAI 2009, 39-40
[22] KERTAI 2009, 42.
[23] BEDFORD 2009, 30.
[24] RIME 2, 172-173.
[25] AL-QARADAGHI 2008, 104.

Zab – during his campaigns and he referred to several cities such as Libê which is probably located in the Raniya plain.[26]

Shalmaneser III (859-824 BC), like his father Ashurnasirpal II claimed that he controlled the region which was administrated by Assyrian governors. He mentioned also the mountain of Kiruri near Arbail, and registered that he moved to the north towards the land of Urartu and later towards the land of Zamua.[27]

Adad-nirārī III (810-783 BC) described himself as the conqueror of the territories: such as the land of Harhar in Media which included the region of Penjwen and Namri to the east of the river of Sirwan and south of the modern city of Darbandikhan, and the land of Utu in the valley of modern Bitwen.[28]

During the reign of **Sargon II** (721-705 BC) he fought against and recaptured the neighbouring kingdoms. In his campaigns he included the land near the river of Sirwan and the Peshdar plain in Qaladze. After that, he conquered the land of Urartu, and plundered the city of Muṣaṣīr at the border of the land of Urartu, which was an important cult centre of the Urartian god Haldi located north from the modern town, Soran.[29]

The upper regions of Mesopotamia and particularly the east valley of the Tigris served well for keeping the frontier and satisfied the agriculture needs of the empire. Therefore, both the landscape features of plateaus and mountains proved to be two of the most important characteristics to maintain the political importance of the region.[30]

Scholars use the term 'the heartland of Assyria' to include the areas around Arbela and the east of the Tigris, the territory between the two Zab rivers (both the lower and greater are included) and the areas which extended to the east of Kirkuk, and then from there to the Zagros mountain.[31]

There is enough evidence which refers to this region and suggests that the area was always important for the rulers and kings of the Neo-Assyrian period. The most

[26] AL-QARADAGHI 2008, 105.
[27] AL-QARADAGHI 2008, 129.
[28] AL-QARADAGHI 2008; 145.
[29] AL-QARADAGHI 2008, 153-154.
[30] RÖLLIG 1995, 119.
[31] RADNER 2011, 321; BARBANES 1999: 18–26; POSTGATE 1992: 251; MACHINIST 1993: 80–81; OATES 1968, I.

important provinces were Amedi, Arbela, Kilizu, Kirruri, Arrapha, and Arzuhina; for these were the most famous provinces during the reign of king Shalmaneser III[32].

During their military campaigns, Assyrian kings ensured that this area was firmly under their control. The first campaign against Urartu, which occurred during the reigns of Shalmaneser III and consequently that of Sargon II (714 B.C), first headed towards the Zagros mountains and then into the lands of Mannea, Zamua and the city of Mușașir, a major seat of Urartian culture.[33] The other significant mention of this region relates to the Assyrian royal roads such as from Assur to Arbela, Arrapha, and Arzuhina, which were all mentioned in certain texts.[34]

2.2. History of the region

All the archaeological data refers that the region was occupied during the Middle Assyrian empire and was the main place for economic and political activities. This region can be divided geographically into two parts: territorial part and the heartland. As mentioned before during the Middle-Assyrian period the region has taken a prestige role and the southern part with its capital of Erbil, the ancient city of Arbela, was a main part of Assyria heartland.[35]

The territory stretches from the east of the Tigris in west from Dohuk, bordered with the Zagros Mountain to the north, and extends to the east and reaches the east of the Diyala region. This was the frontier part of the middle Assyrian empire which fluctuated, and sometimes allowed the rise and creation of new kingdoms which could threaten the trade routes towards Iran and Anatolia, such as Guti and Lullubi. It was located between the Babylon and Assyria and controlled the routes towards the Zagros Mountains and then to Iran. On the other hand, controlled also the routes towards Babylon in the east and Syria and Anatolia in north and west. On this land two big rivers flow: the upper Zab – which arises from Anatolia – and the lower Zab – coming from Iran – which make the region more fertile and suitable for agriculture. The city of Erbil, the heart of the zone, was one of the political and cultural centres of Assyria,

[32] GRAYSON 1993, 42-46.
[33] HEALY 1991, 25-32.
[34] KESSLER 1997, 131-132.
[35] RADNER 2011, 321.

which is also indicted by the fact, that the Goddess Isthar – one of the most respected gods of Assur – had a temple dedicated to her on the citadel of Arbela.[36]

The politically unstable frontier region in the Middle-Assyrian period was surrounded by the Zagros Mountain in the north, Arrapha in the east, Tigris in the west and the north of the city of Erbil is the south. The rise of new kingdoms was quite frequent and threatened the border of the empire multiple times.

The Neo-Assyrian Empire was founded in 935 BC during the period when new techniques and new types of national powers appeared. This period can be divided in three levels: first, the consolidation marked by the reign of Assurnasirpal II and Shalmaneser III between 883 and 824 BC. The second phase was the expansion (744-704 BC) which took place from the reign of Tiglat-pileser III (744-727 BC). The last phase, which covers the rise and fall of the empire (704-612 BC) begun with the reign of Sennacherib (704-681 BC). Finally, Aššur fell during the siege of the alliance of the Media and Babylonia in 612 BC.

The location and geographical features made the Neo-Assyrian empire stronger and during this period the region gained a more stable political situation. But the frontier kingdoms always meant a great threat to the political integrity.

During the reign of Aššurnasirpal II (883-859 BC) a military campaign was taken through the frontier region and border of the empire to defeat the kingdom of Zamua located around the city of Sulaymaniyah. The written sources tell that he took to route of Bazyan, captured may cities along the ways and defeated the kingdom.[37]

In addition, there were many military activities taken place even in the heartland of the Assyrian empire. The main cities, such as Arbela, Idu, Kilizu, Habruri (north-west of Erbil), Arzuhina and Zamua, could also be captured by foreign forces, and had to be retaken. For example, Adad-nirārī II (911-891 BC) mentioned that he retook all the lost cities and reset the empire's original boundaries.[38]

The city of Erbil was a key part of the Neo-Assyrian heartland and dominated Northern Mesopotamia both in cultural and political aspects. The three main cities of

[36] RADNER 2011, 322-323
[37] PAPPI 2012, 606
[38] PAPPI 2012, 605

the empire: Assur, Nineveh and Arbela formed a triangle, with Assur lying 105 km south, and Nineveh 80 km west from Arbela.[39]

2.3. The history of Erbil and the Erbil plain

The capital of Iraqi Kurdistan is also known as Hawler in Kurdish and during the ancient times it was known as Arbela, originating from the Neo-Assyrian period. The location of Erbil has proved important during its ancient past, as retains this strategic position still today: it is about 180 km away to west from the province of Sulaymaniyah, about 90 km from the province of Kirkuk which lies south, about 150 km from the province of Dohuk to the north and about 85 km from the province of Nineveh. It is a journey of 350 km south to the capital of Iraq, Baghdad.

The name of Arbil or Erbil is derived from the word Urbillum which was mentioned first in the late 3rd millennium BC in correspondence of Shulgi, the second king of the Sumerian renaissance during the Third Dynasty of Ur. The word itself means: the four Gods. One may also come across another mention of the city Arbela in 2300 BC in a cuneiform text that was found under the ruins of the city of Ebla in Syria.[40] Ebla lies about 750 km away from Erbil and we know that the city was destroyed by the Akkadian empire, and was later found and excavated in 1970, when thousands of texts were discovered. One of those mentioned a messenger receiving 5 shekels of silver to pay for a journey to Arbela.[41] A century later, the city was conquered by the Gutians, who wrested the authority from the Akkadian empire. We know that during this conflict the governor, Nirishuha, was captured alongs with some inhabitants of the city. At the end of the 3rd millennium, 500 soldiers were sent to the city in an attempt to subdue rebellions.[42]

During the reign of Šamši-Adad he captured the king of the city, and the settlement passed through the following decades, the Mitannian- and Middle-Assyrian periods, without any mention.[43]

By the 12th century BC, the Assyrians built the temple to Ishtar. An inscribed clay cylinder, that was found at Nimrud, describes how the Assyrian king Esarhaddon

[39] RADNER 2011, 322.
[40] MATTHIAE 1997, 180-182.
[41] MCGINNIS 2014, 46.
[42] MCGINNIS 2014, 47.
[43] MCGINNIS 2014, 69.

had built the temple of Ishtar.[44] During the 7th century, a stone relief, depicting Arbela's walls with its arched gate, was found at Nineveh.[45]

Erbil during the Middle- and Neo-Assyrian periods had a significant role due to political, economic, religious and geographical reasons. It was one of the main pillars of the empire politically, and served as a starting point of various military campaigns against the hostile countries as well. Economically it provided the agricultural supplies for the empire and was the main religious centre to worship the goddess Ishtar of Arbela. The mountainous region on the border of the province of Erbil has created the natural wall to protect the capitals of Assyria from the threat of its enemies.

2.4. The archaeological sites of the Middle- and Neo-Assyrian periods

For a long time, the region of Iraqi Kurdistan was a neglected area in terms of Iraqi archaeology. Only small surveys and limited excavations were done, despite the fact that in the region of Erbil there are more than 1000 known tell settlements. Since 2003, the archaeologists of Iraqi Kurdistan undertook a considerable number of surveys and excavations across the three provinces of the region: Erbil, Sulaymaniyah and Dohuk. The surveys from Harvard University, led by Jason Ur, and the recent excavations from various European, American and East-Asian projects helped to gain new information about the regions history and provided detailed archaeological data.

In the province of Erbil, the previous excavations in Makhmur plain: Tell Ibrahim Bayiz (Old Makhmur), Tell Akrah, Kawla Kandal; in the plain of Erbil: Qasr Shamamok, Tell Kilik Mishik, Tell Qasra. Bash Tepe, Qush Tepe, Grdi Mamostayan; and towards the Raniyah plain: Tell Basmussian, and the last the Citadel of Chemchemal, showed archaeological remains dating to this specific period.

For example, from Tell Basmussian II provides a big number of sherds dating to the Middle-Assyrian period, and probably this is one of the main sites in the upper part of the lower Zab when pottery study is considered. The other information available is the Archive of Shemshara in which there are mentions that the Rania plain was the fertile plain and metallic centre for all the kingdoms of the north Mesopotamia.[46]

[44] MCGINNIS 2014, 72.
[45] MCGINNIS 2014, 80.
[46] PAPPI 2012, 607.

The archaeological remains from Makhmur plain, Tell Ibrahim Bayiz (Old Makhmur), Tell Akrah, and Kawla Kandal provided information of Neo-Assyrian occupation, as well as Qasr Shamamok, Tell Kilik Mishik, Tell Qasra. Bash tepe, Qush tepe and Grdi Mamostayan. The Neo-Assyrian sites on the Raniyah plain are represented by Qura shina, Kamyrian, Tell Bor and Basmussian, Shemshara, Mullah Omer, Botan, Tell Qla, Tunkija, Qala-Kawi, Kara Qaj, Mullah Shel and Tel Dem.[47]

Erbil citadel is the most important archaeological site located in the centre of the modern city. It has an obvious ovoid shape, with large outer wall which dates to the Ottoman period and continues to surround the citadel till this very day. A major thoroughfare exists from the northern gate directly towards the southern gate that separate the city into two parts. The existing houses have been continuously built over the ancient ruins from previous periods, which according to the specialists, means that the occupation of the citadel dates back to 6000 BC.[48]

It is known that the citadel lived through many periods of history and the pottery sherds date back to the Halaf, Ubaid, and Uruk periods and through the early, middle, late bronze ages to the more recent periods.[49]

[47] AL-SOOF 1970, 65-105.
[48] MCGINNIS 2014, 25.
[49] MCGINNIS 2014, 24.

3. History and the Studies on Middle and Neo-Assyrian Pottery

Unfortunately, as mentioned before, this region was neglected for a long time in the major studies on this topic, but hopefully the academical works from other parts of northern Mesopotamia such as north Syria and south eastern Tukey will provide enough information to serve as a base for this thesis.

3.1. Literature of Middle-Assyrian pottery

The publications on the Middle-Assyrian pottery outside of Iraqi-Kurdistan in the past year shed a new light on the matter of ceramics and pottery production in Northern Syria and the Mosul region. Numerous excavations from various tell sites from the area also provided valuable information on this topic.

The first, more detailed work of the Middle Assyrian pottery was written by Peter Pfälzner. The author focused on the classification, identification of the fabric groups, furthermore, demonstrated the manufacturing, function, comparison and distribution of the products. A huge amount of pottery from Tell Sheikh Hamad and Tell Bderi were studied and compered with materials belonging to many different sites.[50]

After that in 1997, the pottery study of Tell al-Rimah was published by Carolyn Postgate, David Oates and Joan Oates, which also included a big amount of ceramics from the period and puts them in a brand-new view.[51]

The first work of Kim Duistermaat with Peter Akkermans was about a kiln found in Tell Sabi Abyad which was used in this specific period of time, and was published 2001.[52] The second detailed work of Pfälzner sums up the late bronze age ceramic traditions of the Syrian Jazirah, which was published in 2008.[53]

The next big work of Duistermaat give a more detailed overlook on the ceramics form Sabi Abyad in 2008.[54] This work is the most comprehensive and useful study regarding the Middle-Assyrian pottery. The author used fresh methods, analysis and techniques such as X-Ray and thin section, which helped to determine the main traits of the fabric itself which were hard to identify prior that.

[50] PFÄLZNER 1995.
[51] POSTGATE – OATES-OATES 1997.
[52] AKKERMANS – DUISTERMAAT, 2001, 12-19.
[53] PFÄLZNER 2007, 231-291.
[54] DUISTERMAAT 2008.

Another well-known publication is the work of Dariusz Szelag from 2012, in which he wrote on the sherds from the Polish excavation of Tell Rejim in Iraq. Both him and Duistermaat emphasize the importance of discussion regarding the chronology and the regional distribution. The other publication of Duistermaat from 2015, which is about the pots from the city of Assur in the land of Hanigalbat mainly focuses on the pottery production in the western part of the empire.[55]

Other significant works on this topic were published from the following sites: Tell Barri,[56] Tell Chuera,[57] Tell Brak,[58] Tell al-Rimah,[59] Giricano Höyük,[60] Tell Taban[61] and Emar.

3.2. Literature of Neo-Assyrian pottery:

For the research of the Neo-Assyrian ceramics, many studies have highlighted the wealth of the archaeological data in Northern Iraq, Syria and Turkey. In Northern Iraq, the excavations at Nimrud provided the greatest sources of information. The site was extensively researched by a British expedition led by Joan Lines in 1954.[62] The study of Haller also gave a new angle to the research of Neo-Assyrian ceramics, for he published a lot of grave pottery from Assur in 1954.[63]

The first deeply detailed publication was carried out by Arnulf Hausleiter and Andrzje Reiche in 1999 about the pottery from the heartland of the empire. This research was presented on conferences and workshops in Heidelberg in 1995 and 1997, and was followed by a contribution which included several researchers of Neo-Assyrian pottery tradition, such as Stephen Lumsden, who worked on the materials from Nineveh, or Hausleiter, who also published the ceramics from Kalhu/Nimrud, with special references to the Polish excavation in the Central Building (1974-76).[64]

The first more detailed work was published in the book of Janoscha Florian Kreppner in 2006 about the pottery form Tell Sheikh Hamad (Dūr-Katlimmu). This

[55] DUISTERMAAT 2015, 126-152.
[56] ANASTASIO 1997,135; D'AGOSTINO 2006, 15.
[57] HARALD KLEIN 1995, 183.
[58] DAVID - JOAN - HELEN 1997, 5.
[59] POSTGATE - OATES- OATES 1997, 37, 43.
[60] SCHACHNER 2003, 151.
[61] HIROTOSHI NUMOTO - DAISUKE–SHIGO 2013, 167.
[62] LINES 1954, 164.
[63] HALLER 1954, 15.
[64] HAUSLEITER 1999, 1-252.

work discusses all aspects of the Neo-Assyrian ceramics, which gives an overall look on the topic.[65] The newest work of Hausleiter from 2010 also provides a great number of detailed information about the Neo-Assyrian pottery from the heartland of Assur.[66]

The excavations and surveys at Tell al-Rimah, Eski Mosul, Hamaidat, Khirbat Hatara, Khirbat Kharhasan, Khursabad, Tell al-Hawa, and Tell Taya also led to important publications about the pottery production in the region.[67] It should also be mentioned that the work of Stefano Anastasio is one of the most important studies regarding the Neo-Assyrian ceramics which was published in 2010. It presents an all-around discussion on chronology and regional distribution.[68]

The other influential publication of Kreppner from 2015 is about an overall study of pottery tradition of the eastern Mediterraneum and the near east, also referring to the questions of use and social significance.[69]

3.3. Survey and excavation:

In the past few years several excavations and surveys were carried out in this region despite the fact that for a long time it was neglected by the cultural management officials of the Iraqi government.

The first excavation works on the Erbil plain were started in 1949 by Mahmood el-Amin and Max E. L. Mallowan. They carried out small surveys and short excavations at the sites of Tell Ibrahim Bays, Kuala Kandal and Tell Aqrah. These excavations brought some Middle- and Neo-Assyrian ceramics to light, although not in a significant number, for it was impossible to reconstruct the history of the whole region according to them.[70]

After these excavations the territory fell out of interest until 2003, due to political relations, but was reopened after for foreign archaeological missions. In 2006 an archaeological survey was carried out by Karel Nováček on the urban centres of Mesopotamia. During this research the different sites also provided ceramic materials

[65] KREPPNER 2006
[66] HAUSLEITER 2010
[67] BALL-TUCKER-WILKINSON 1989, 1-66.
[68] ANASTASIO 2010, 1-197.
[69] KREPPNER 2015, 215-236.
[70] EL-AMIN – MALLOWAN 1950, 55-90.

form the Assyrian periods.[71] In 2008 Hausleiter found and excavated a tomb full of Neo-Assyrian pottery, and also a big number of complete vessels, in the city of Erbil.[72]

In Kova, another district about 70 km from Erbil, the site of Satu Qala was excavated by Wilfred H. Van Soldt in 2010.[73] In 2010 the French team with cooperation of the Salahaddin University carried out an excavation at Tell Kilik Mishik.[74] Both these works provided a great number of Assyrian ceramics. Furthermore, from the site of Qasr Shamamok, excavated by Olivier Rouault in 2011 we know a lot of sherds dating to this specific period.[75]

The Erbil plain archaeological project started 2012 and shed a new light on the history of the region based on the pottery chronology as well.[76] An important site regarding the Middle-Assyrian pottery is Tell Bash Tepe which was excavated in 2013 by Lionel Marti. So was the site of Kurd Qabrstan where Glenn M. Schwartz excavated in 2013.[77]

One of the most important sites in the period was the Erbil Citadel itself, which is an enormous mound still inhabited today, covered with buildings from the 18-19th century. The excavations could finally start in 2013 with the direction Dara al-Yaqoobi, and resulted in the finding of a considerable amount of Neo-Assyrian sherds. In 2013 the Tell Helawa excavations were started by Luca Peyronel, and the Tell Baqrta excavations by Konstantinos Kopanias in 2014.[78]

In the second most important province, Dohuk the Eastern Habur Archaeological survey was carried out in 2013 by Peter Pfälzner.[79]

In Sulaymaniyah, the plain of Shahrazur, and the dam of Dokan, has been the areas which were primarily studied by archaeologists; during 1959 and 1960, the sites of this region were surveyed and some were also excavated by the Iraqi Directorate General of Antiquities. The area which was submerged around Dokan dam was also

[71] KOPANIAS ET AL 2015, 20.
[72] KOPANIAS ET AL 2015, 19.
[73] KOPANIAS ET AL 2015, 42.
[74] ROUAULT - MARIA 2010, 1.
[75] KOPANIAS ET AL 2015, 45.
[76] KOPANIAS ET AL 2015, 16.
[77] KOPANIAS ET AL 2015, 10, 17, 26.
[78] KOPANIAS ET AL 2015, 8, 29.
[79] KOPANIAS ET AL 2015, 15.

surveyed and excavated by the Directorate under the direction of Behnam Abu al-Soof in 1956.[80]

Tell Bakrawa is the biggest tell on the Sharazur plain which was excavated by Peter A. Miglus in 2010.[81] Tell Sitak is another settlement nearby where a project started in 2010 by Saber Ahmed Saber and Hussein Hamza.[82] In Chemchemal the centre of the city, a huge tell was researched by Margarete van Ess, Marta Luciani and Saber Ahmad in 2012.[83] The archaeological digs at Tell Begum started in 2013 with the supervision of Olivier Nieuwenhuyse.[84]

On the Ranya and Peshdar plains many archaeological projects are still ongoing, but some already finished their last seasons. For example, Qalat Said Ahmadan from the Neo-Assyrian time was excavated in 2014 by Akira Tsuneki.[85]

Another detailed and useful work and publication of the pottery from this era comes from the Peshdar plain project. The excavators published three volumes of preliminary reports from their seasons between 2015 and 2017, including very detail studies from the Neo-Assyrian ceramics from Gird-I Bazar and Qalati Dinka.[86]

The last significant excavation mentioned here is the fieldwork of the University Eötvös Loránd at Grdi Tle in Ranya plain which has been started by Tamás Dezső and Gábor Kalla in 2016. The archaeological work at this sire provided new and important results regarding the local Neo-Assyrian ceramic production and has shed a new light on the history of the frontier region of the Neo-Assyrian empire.[87]

Unfortunately, most of these works have not been fully published yet, only preliminary reports and articles are available, but hopefully soon enough these projects will present new information and data about the chronology and general archaeological context of the region.

[80] ABU AL-SOOF 1970, 3-31.
[81] KOPANIAS ET AL 2015, 7; MIGLUS ET AL 2013
[82] KOPANIAS ET AL 2015, 47.
[83] KOPANIAS ET AL 2015, 14.
[84] KOPANIS ET AL 2015, 12.
[85] KOPANIAS ET AL 2015, 36.
[86] HERR 2015, 80-100, HERR 2016, 104-127, HERR-OTHMAN-SALIH 2017, 120-133.
[87] DEZSÖ ET AL 2016 ; 2017

4. Archaeological context of the ceramics

4.1. Introduction

The tell of Kilik Mishik is located within the city of Erbil itself, in the south-west area known as the Shade neighbourhood. It was declared an archaeological site in the Iraqi Events Journal on the 2nd of February 1946 under the number 2345. According to an older satellite photo, the tell is surrounded by many streams which means that the region was originally the area which contained most of the industrial units, but due to the development and expansion of the city, it became a predominantly residential area. For this reason, the tell has not been conserved well and signs of significant destruction and damage can be seen from each side.[88]

The settlement is only 5 km away from the citadel of Erbil, which was the most significant political power in the region. Furthermore, the tell was located on the important road connecting the Assyrian imperial cities and the River Zab. The surface of the site is about 240-290 m^2 and the height is 10 m. The highest point of the mound is 399.66 m above sea level.

On the surface an Islamic cemetery and many modern pits could be found. The topographic plan of its archaeological phenomena was completed by Dr. Hashim Yassin from the Geography department of the faculty of Arts, Salahaddin University.[89]

The area of the tell is about 8 ha, though many traces of erosion caused by rain and environment exchange can be observed. Notably the northern part is greatly damaged due to the regular rainfall, thus it has not been well conserved. It also has been exposed to destruction caused by human factors. In contrast, the southern part is conserved relatively well because it is a little further away from the major human activity.[90]

According to an older satellite photo, the tell is surrounded by many streams which means that the region is rich in water, which was ideal for agriculture across the whole plain. The quarter, in which the tell is located in, was originally the area of the most intensive industrial activity, but due to the development and expansion of the

[88] AL-FAHDAWI 2010, 4.
[89] ROUAULT - MARIA 2010, 4.
[90] ROUAULT - MARIA 2010, 3.

city, it became a predominantly residential area. For this reason, and the constant construction works, the tell was exposed to major damage.[91] (Fig.2)

Fig.2, Aerial view of Tell Kilik Mishik

Despite the damage inflicted on the site, many sherds and shards could be found (painted, glazed pottery and glass), as well as broken pieces of baked-bricks concentrated on the northern part of the tell. On the other hand, this does not seem to be the case on the southern part as there has not been a significant number of sherds. Many of the ceramic sherds from the surface of the tell date back to the neo-Assyrian period, but the ancient and medieval, Islamic periods are also well presented. Finally, the name of the site, Kilik Mishik comes from Kurdish – as it is a popular name that the locals use –, and means the tail of the mouse.[92] (Fig.3)

[91] AL-FAHDAWI 2010, 3.
[92] AL-FAHDAWI 2010, 3

Fig.3. General View of Tell Kilik Mishik

There are several tells around the citadel of Erbil, therefore we can easily suppose that these settlements were arranged or committed to produce goods for the city of Erbil based on the fact that they are near to the citadel and have good connections to the road that liked Erbil to Aššur and Nineveh. The following tells have been identified around the citadel:

1. Tell Qasra, located in the quarter of Ankawa towards to the North-West of the citadel.
2. Tell Kilik Mishik, located in south-west of citadel.

The site was excavated by numerous teams: the French team, led by Professor Olivier Rouault in 2010, and Salahaddin University's team diercted by Dr. Yusuf Khalaf Alfahdawi in 2010. The French team has not returned to the site since then, as they signed a different contract with the Directorate General of Archaeology in the Kurdistan Region, and as a result now they are focusing on their work on Tell Qasr Shamamok. Nonetheless the excavations did not stop after that, during the 2011 to 2013 mission, the team was led by Assist. Professor Dr. Naaman Jumha Ibrahim. (Fig.4)

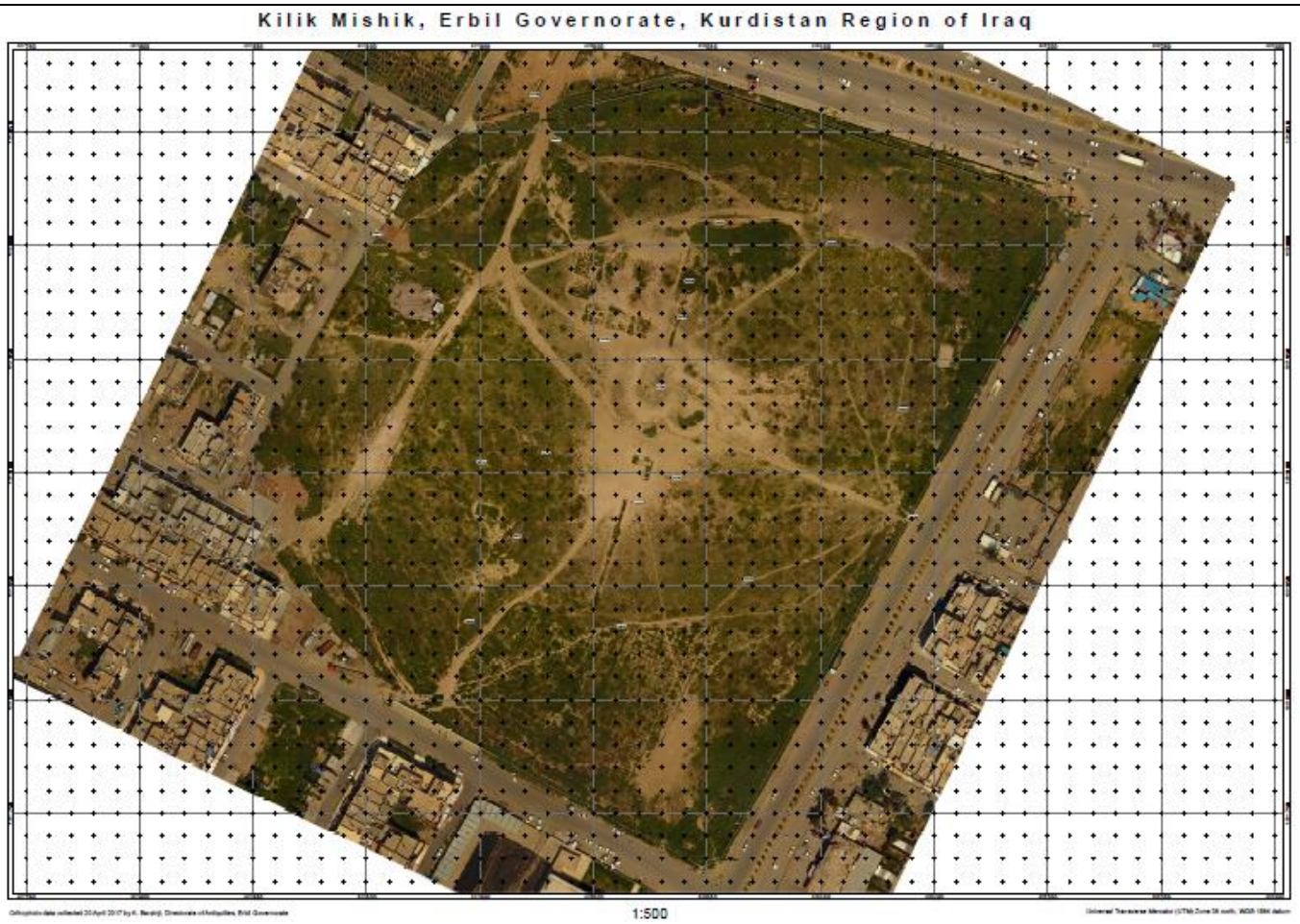


Fig.4. Aerial view of Tell Kilik Mishik, (UR, J. – KAHLIL, A. B. EPAS Project, 2017)

4.2. Excavations at Tell Kilik Mishik

The excavation at Kilik Mishik was carried out in 2010 by a French mission (led by Professors Olivier Roualt from Lumière University Lyon 2 and Maria Grassia from EPHE) in cooperation with the Salahaddin mission (Dr. Yusuf Khalaf Alfahdawi). The aim was to look for the temple of Ishtar. During the research the following areas and trenches were open: Area A includes trench K1, K3, K5, K6, and K12, Area B trench O13 and the Area C trench 16, 17, 18 and 19. Later the excavations were continued for three more seasons in 2011, 2012 and 2014 by the department of Archaeology from Salahaddin University, with the direction of Assistant Professor Noman Jumha Ibrahim. The work went on in the following trenches: J6, K7, L7 and M7.

4.2.1. The Archaeological context of the ceramics

The site of Kilik Mishik was inhabited during six periods of time: late Islamic, Parthian, neo-Assyrian, middle Assyrian, late Bronze Age, and middle Bronze Age. This study focuses only the Middle and Neo-Assyrian ceramics. The stratigraphy was reconstructed according to three Areas A, B, C, including many trenches.[93] The mound of the site emerges 10 m above the adjacent plain. (Fig.5) The ceramics discussed in this thesis came from the excavated areas depicted on (Fig. 5 and 6).

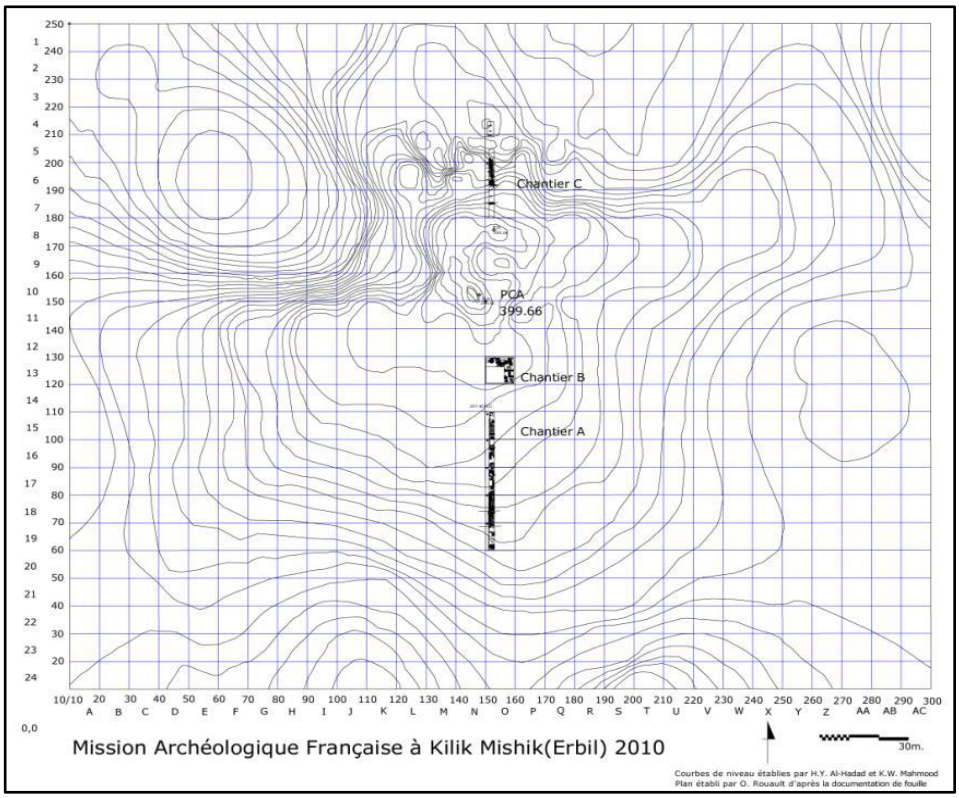


Fig.5, Photographic map of Tell Kilik Mishik with the Areas, after Al-Fahdawi 2010, 10.

[93] ROUAULT - MARIA 2010, 1.

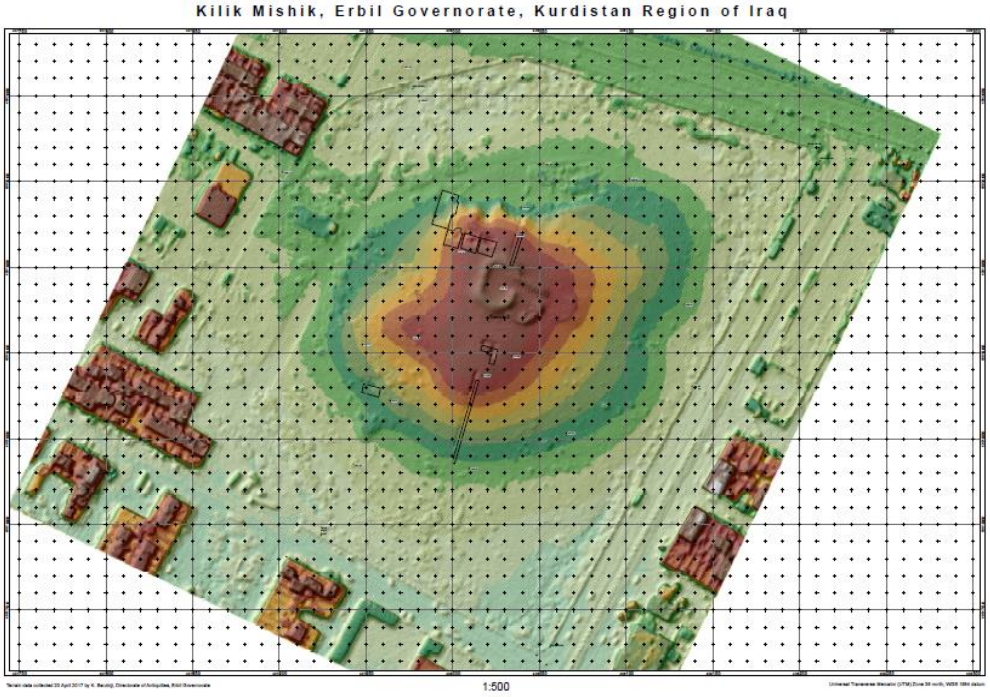


Fig.6. Topographical view of Tell Kilik Mishik, after, (UR, J. – KAHLIL, A. B. EPAS Project, 2017

Area A: Area A was dug 10 m to the south of Area B and about 70 m from the south of Area C. The trench was about 50 m long and 2 m wide, located at the southern tip of the tell to the northern end of the slope (fig.7A and 7B)

The area was divided into 5 trenches of 10 m, from the north to the south: K1, K3, K5, K6, and K12. Each trench is identified according to the relation with the trench to its west.[94]

Trench K1 was located on the top of the tell on the south line of the area. The trench was separated from area B and C with a huge military building dating to modern times, which lays on the top of the mound. In addition, the first level of the K1 was about 397.40 m above sea level and the first level of K12 was about 392.33 m above, which shows the angle of the slope of the tell. The lowest point of this area was located in K12, which was 389.60 m above the sea level.[95]

[94] ROUAULT - MARIA 2010, 5.
[95] ROUAULT - MARIA 2010, 6.

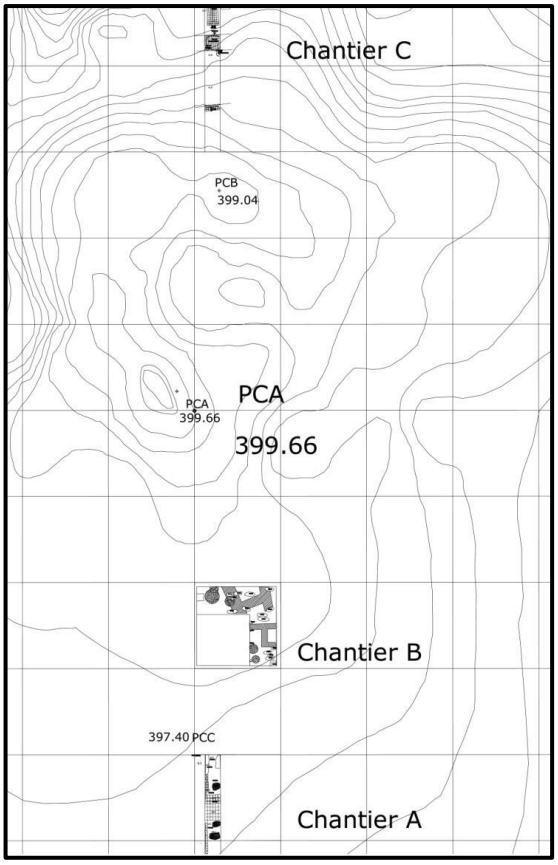


Fig. 7A: Plan of the Tell from the centre, ROUAULT - MARIA 2010, 25.

Fig. 7B: General View of Area A. after ROUAULT - MARIA 2010, 26.

Area B Trench O13: The team from Salahaddin University chose to dig an L shape trench about the width of 3 m. After removing the surface soil, at a depth of around 15-20 cm, they discovered a mixture of different ceramics dating back to the following periods: Abbasid (8th-13th century), Hellenistic (2nd-4th century), Neo-Assyrian (900-700 BC), Middle Bronze Age (Nuzi and Khabur ware). The trench had two levels: the first belonged to the Seleucid period whilst the second provided a layer of Neo-Assyrian phenomena.[96] (Fig.8)

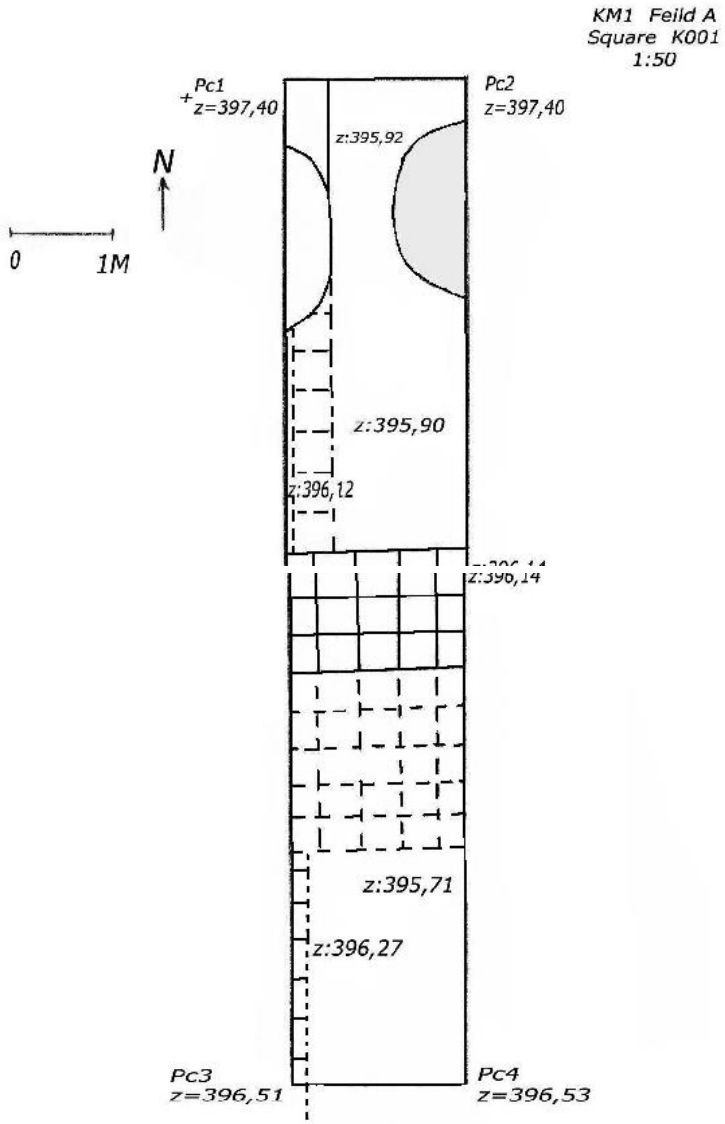


Fig.8, Area B framework, AL-FAHDAWI 2010. 13

Area C: This area is consisting of a trench of 40x1,80-2 m, and was implanted south of the north slope of the tell, its highest point is 398,05 m above the plain in the

[96] AL-FAHDAWI 2010, 3.

south and 390,03 m in the north (Fig.9). Trench K2, K7, K19, M7, L7 and J6 belonged to this area.[97]

The goal of the works in this longer trench opened by the French team was to obtain a more complete knowledge of the history of the occupation of the tell. From the highest to the lowest point, they were able to quickly identify several levels of architectural remains and occupational phases.

The slope of the tell is marked by a fairly steep gradient, caused by the heavy rains which brought a thick layer of collapsed bricks and mixed material, and destroyed the structures of the most recent layers but also affected the ancient ones, making the identification and study of the occupation levels somewhat difficult. At the northern edge of K2, corresponding to the southern side of K7, the cliff is steeper, making the study of the layers almost impossible. At the northern side of K2, in correspondence of the edge of K7, the slope is also steep. From this trench, we could identify seven different levels.[98]

[97] ROUAULT - MARIA 2010, 13.
[98] ROUAULT - MARIA 2010, 14.

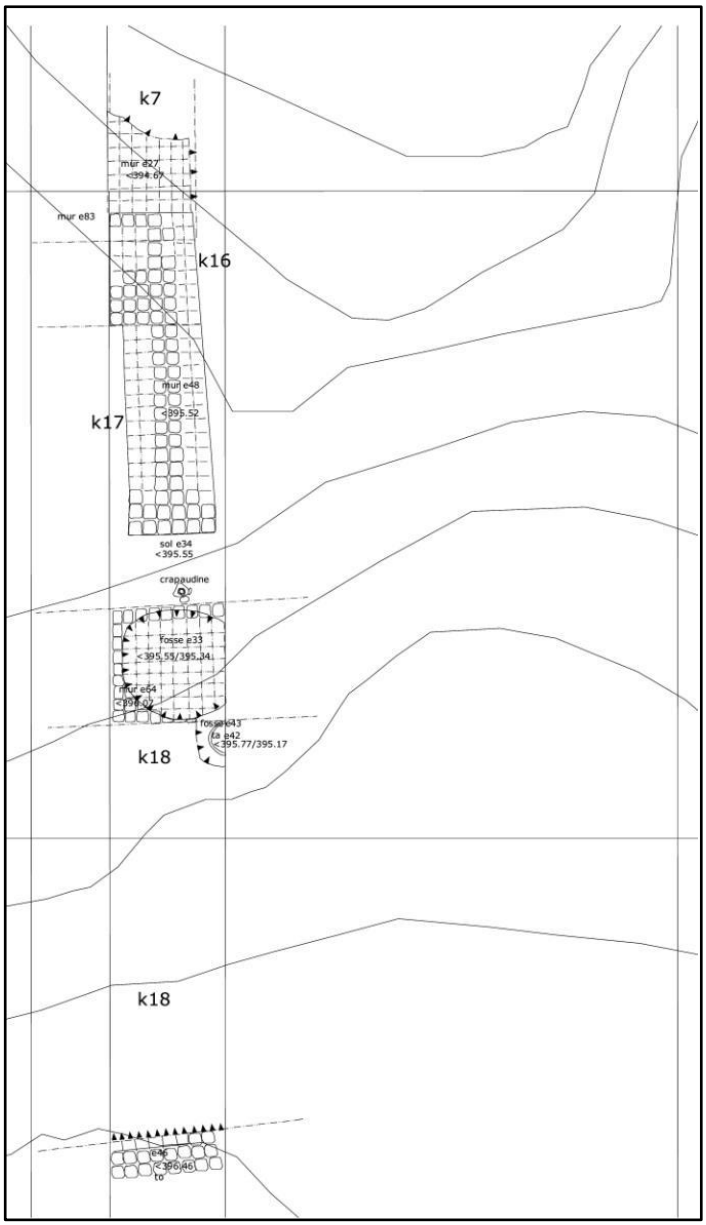


Fig.9, Area C, level 4, trench K.16, 17 and 18, after ROUAULT - MARIA 2010, 33.

During the excavation at this trench architectural structures, mainly mud-brick walls have been discovered in level 1, approximately 20-30 cm deep. In trench K7 in the north-west corner of a structure a kiln was found (Fig. 10A and 10B). In the building three child graves were discovered as well.[99] A similar structure was presented in level 2, also from mudbricks and with four burials. Furthermore, a vaulted tomb was unearthed with several non-complete vessels.

[99] IBRAHIM 2011, 2-5

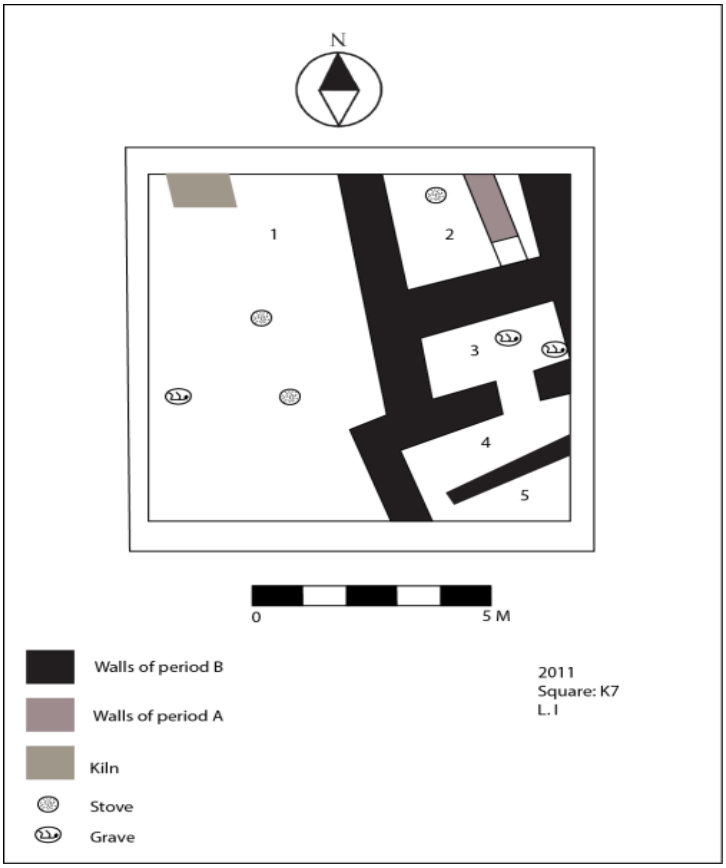


Fig.10A, Trench K.7, level I, IBRAHIM 2011, 16.

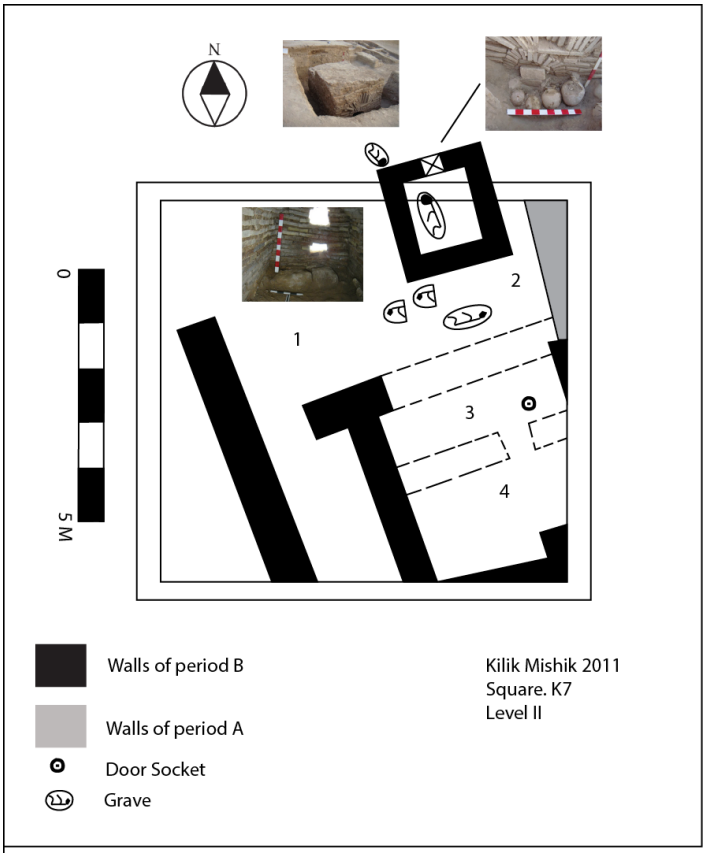


Fig 10B, Trench K7, level II, IBRAHIM 2011, 15

Trench M7 was near the top of the tell and close to trench K7. This part, due to the weather and a destruction occurred twenty years ago, was rather damaged, and it was difficult to separate the walls and the mudbrick debris.[100] (Fig.11).

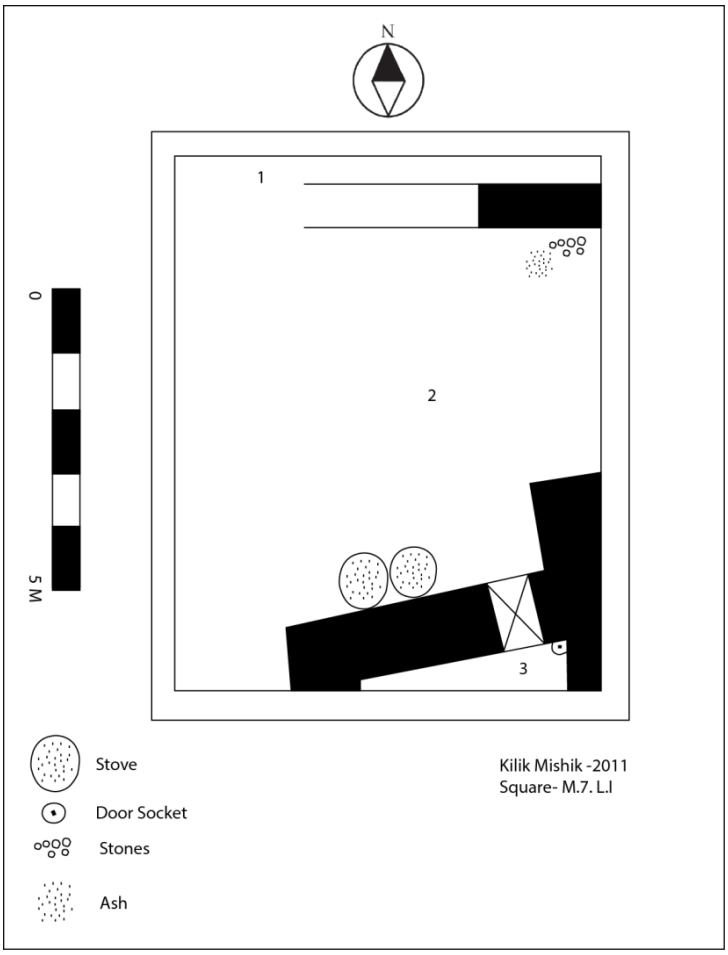


Fig.11: trench M.7

Trench L7 was dug on the north-west axis of the tell. The size was approximately 10x10 m, and was located between the old trenches of the 2011 season. During the excavation two levels were clearly identified: level 1 belonged to the Neo-Assyrian period with a dining space, and level 2 dated back to the Middle-Assyrian times with presenting only an open, outside space. (Fig.12).

[100] IBRAHIM 2011, 9.

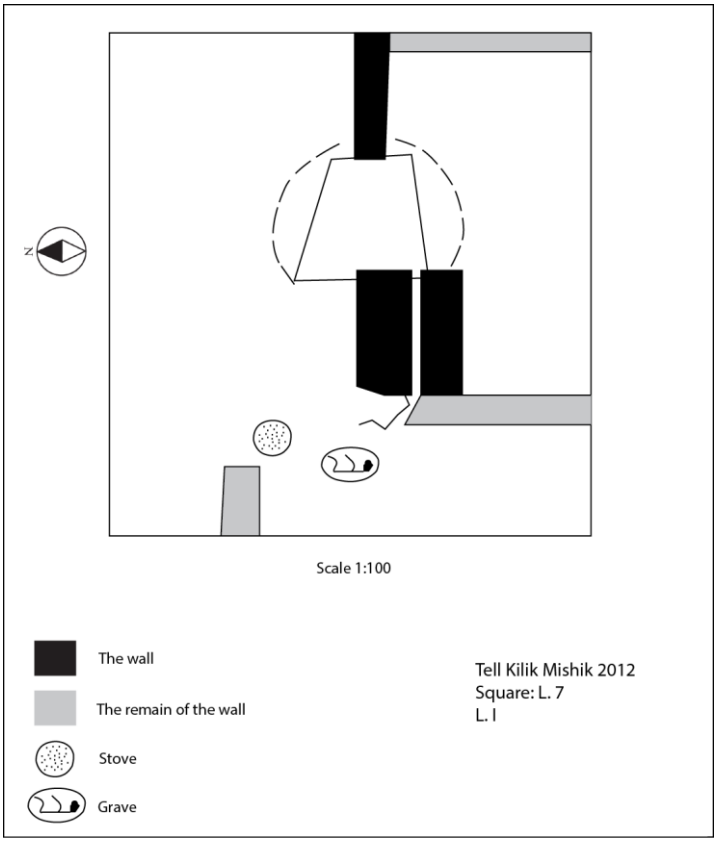


Fig.12, trench L.7, IBRAHIM 2012, 17.

Trench J6 is located on the lower north-west section of the tell, also with the size of 10x10 m. Two levels could be separated here, from which the first one dated to the Neo- and the second to the Middle Assyrian times. The spaces discovered in this trench are of an unknown function. (Fig. 13)

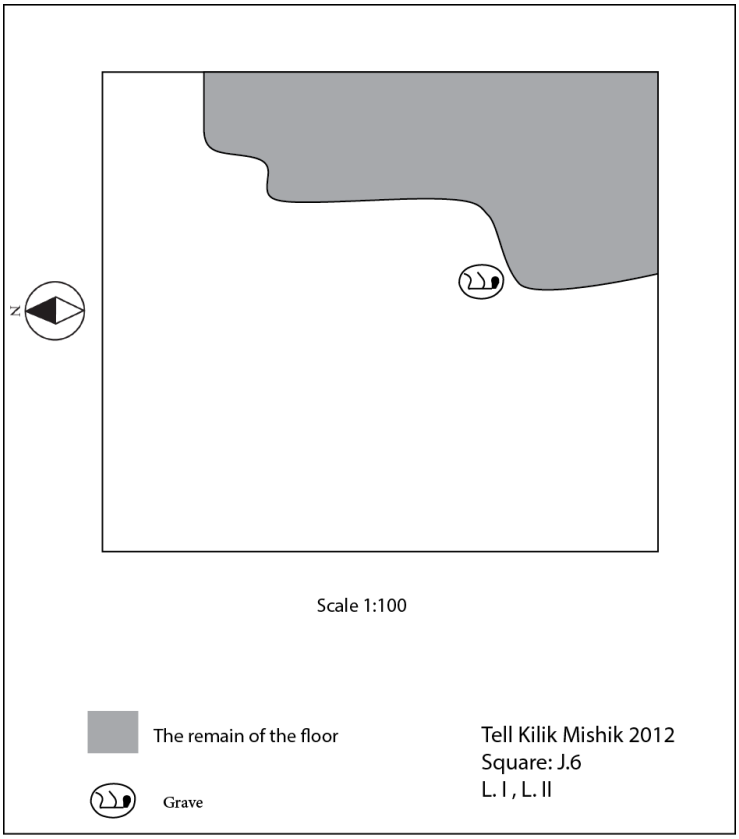


Fig. 13, trench J.6, with levels I and II, IBRAHIM 2012, 18.

4.2.2. Middle-Assyrian layers and features

In trench K7 after the removal of the thick, 20-30 cm wide surface layer a level (level 1) was found with wall structures, which were built in clay and rectangular mudbricks of different sizes (42x42x10 cm and 26x14x8 cm). In this level five different locus was identified. The first belonged to a big courtyard of a workshop with a kiln in the north-west corner and a stove in the center. The rest of the loci served as a household and a graveyard. Graves were unearthed in locus 1, 2 and 3.

The first grave in the south-east part of locus 3 was a huge jar used as an infant burial with more than one bodies. The second burial found was under the first one, and was placed in a cooking-pot. The third grave, in locus 1 on the western part also consisted of a jar serving for an infant's burial place.

The walls of were built in clay and mudbricks (38x38x10 cm and 26x14x8 cm), and were built right on the wall-structures of the below level (level 3).[101] In trench II, four graves were discovered; from which the most important grave was the vaulted

[101] IBRAHIM 2011, 4.

tomb which shows a remarkable similarity to the Sheikh Choli tomb. Further details regarding this building have been explained later in this chapter[102]. This trench includes four spaces: two graveyards and two rooms belonging to a household. The first two include four graves with funeral vessels and other goods.

The most interesting grave is the vaulted tomb with many human and animal skeletons disturbed and scattered. The animal bones probably belonged to the funerary offerings. In front of its gate big vessels were found, and a small colored jar with two bands of red was unearthed in the inside of the tomb. The ceramics are serving, drinking, eating, brewing and burial vessels. (Fig.10A and 10B)

In trench J6 the II level belonged to the Middle Assyrian period, but its archaeological context is not clear for it was excavated only for a short period. Therefore, only a floor of uncertain nature was found in the south-eastern part of the trench. Only about 60 sherds and 3 complete vessels were unearthed here.[103] (Fig.13) Furthermore, also a part with disturbed materials and phenomena from different kinds were found, such as big stones, a floor covered with small gravels, figurines, arrow heads and some needles. The pottery coming from here was preserved in a rather good condition.

In trench L7 on the second level the remains of two linked walls were discovered, which extended from east to west. Adjoining these walls there were 5 sections of buildings. The first one was a service court and was located in the western half of the trench. A kiln was placed in the north-west corner and a stove in the middle of the court. (Fig. 12)

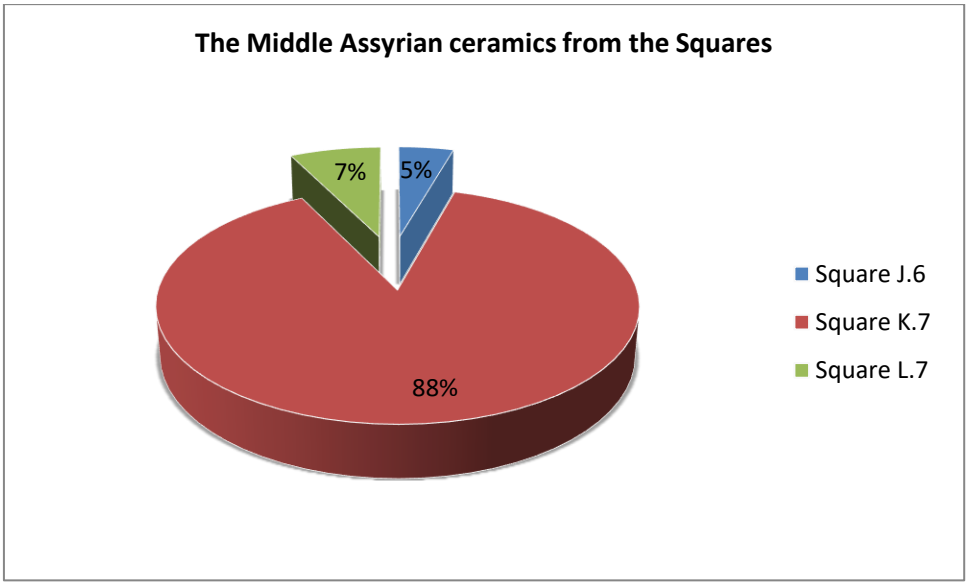
The remaining 4 sections extended from the north to the south in parallel to the east section of the trench, theses sections appear to date to two different periods: identified as period A (new) and B (older).[104] This trench did not provide a clear evidence for its original context, but the excavations unearthed a floor, a grave and a huge amount of big storage jars with serving vessels. In addition, the remains of the structure of the walls are well preserved. Based on the situation of the features, it seems that they served originally as a storage unit.

[102] OTHMAN 2017, 210.
[103] IBRAHIM 2011, 11, IBRAHIM 2012, 8.
[104] IBRAHIM 2011, 3.

The identified levels and the percentage of the ceramics from all trenches have been illustrated on Table 1 and Graph 1.

Middle Assyrian												
Trench	Level	Function of the loci	Basin	Plate	Bowl	Goblet	Pot	Jar	Pot-stand	Strainer	Body sherd	Total
J6	2	Unknown						1	2			3
K7	1	House hold and workshop			11	5	1	16		1	11	45
	2	House hold and Grave-yard			1	3	1	9			1	15
L7	2	Open space				1		3		1		5
Total					12	9	2	29	2	2	12	68

Table 1: The Middle Assyrian levels with all aspects



Graph 1: The Middle Assyrian ceramics from all the Trenches

4.2.3. Neo-Assyrian layers and features

At Area A in trench K1 level 1 could be fated to the Neo-Assyrian period. The trench itself was located on the southern part, near the top of the tell. The highest surface layer recorded was 397,40 m high. On the contrary, the highest point of K12, at the bottom of the slope was 392,33 m. In trench K1, an open space could be observed on level 1, with walls e22, e48 and e39. Furthermore, also the floor e24 was found which provided a big amount of pottery with 33 sherds. The wall e48 was cut by the pit e49 at its north-western part. In the middle of the east part one tannur (e12) was placed. (Fig. 14)

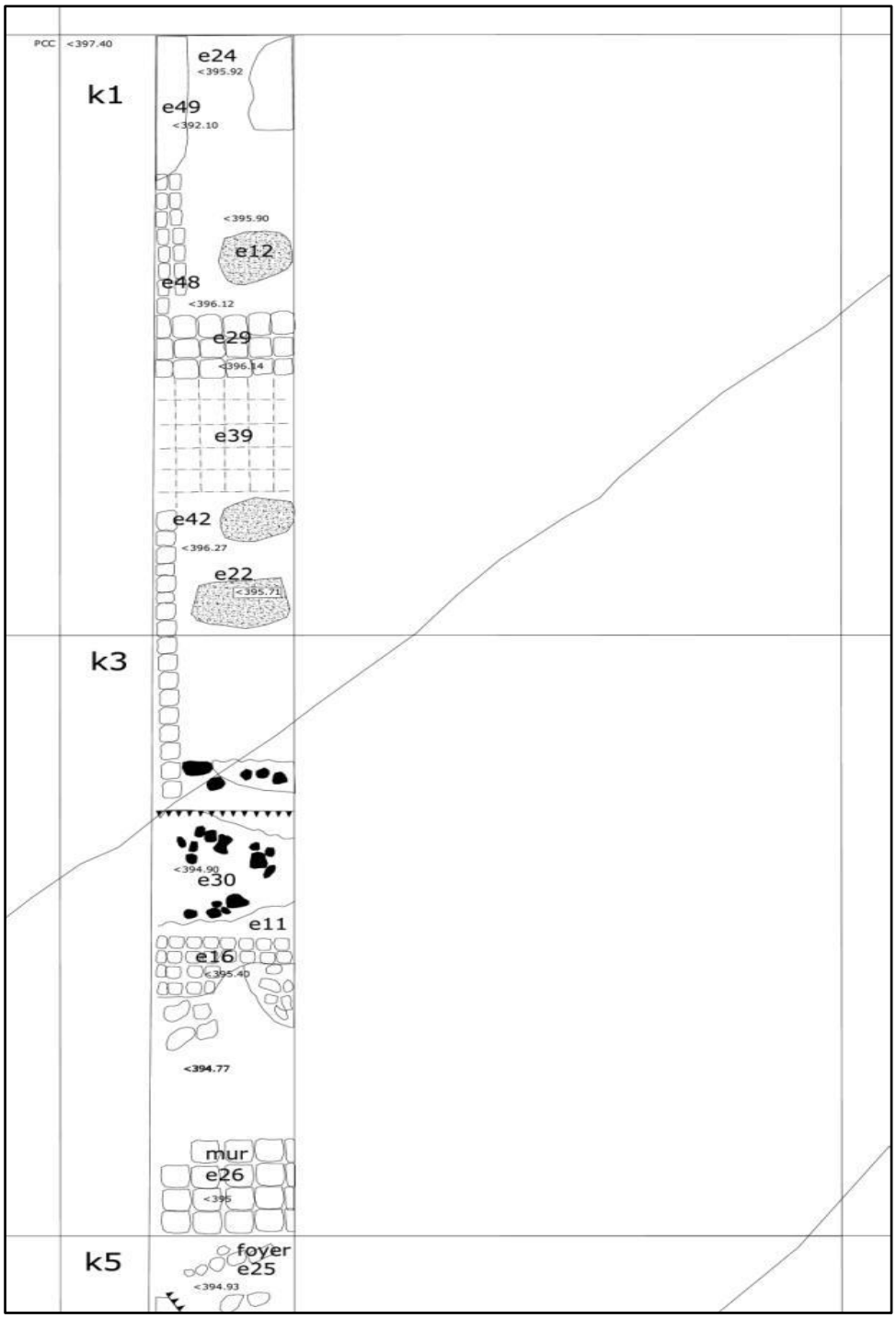


Fig.14: trench K.1 and K.3

In trench K3, on level 1, on the slope of the tell, many surfaces (e6, e8, e13) and a building were found. Luckily the covering layers were not too thick so the archaeological features started right under the surface. (Fig.14)**.**

The southern part of trench K3 three Neo-Assyrian floors could be seen, moreover, wall e42 and floor e22 was found. This floor was cut by pit e30 and extends

towards the south. Floor e11 was joined to a mudbrick wall (e16), which is oriented east-west, slightly to the north. This wall was parallel to e39, and it is possible that it was right side of wall e42. Three structures next to formed another closure which was visible in trench K15 as part of the Neo-Assyrian locus. Two floors, a younger e22 and the older e11 belonged to this structure. The wall e16 was cut by pit e31 on its southern side, which was approximately 3 bricks deep.

Trench K15 was deeply disturbed by a big pit (e30), which presented a diversity of fillings. The deep pits are e61, e70, with a maximum depth of 394,90 m, and without any materials, pebble clusters and the fragments of baked-bricks. They seemed that they belonged to a structure perhaps an installation for e43, which served as an unidentified surface arrangement.

The area was covered with almost pure clay (e23), a lacustrine deposit, which was 395,54 m high.[105] Next to the slope, towards the south, another mudbrick wall was found (e26), oriented east-west, that is separated from the southern side of wall e16: the layers of surfaces and a pit (e31), which disturbed a layer of very compact earth (e40), which was related to the wall, and contained almost no material. The maximum height of this level was 394,86 m.

Despite the orientation, it is not affirmed that the wall e26 and e16 belonged to the same level, in fact, e26 seems to have many installations, which go rather deep, and are visible due to a big pit (e41).[106] (Fig.15)

The floor e11 provided many ceramics, the number was about 21 sherds, which were mostly serving vessels. The function of this space is still unidentified due to the two big pits (e30 and e58).

[105] ROUAULT - MARIA 2010, 7.
[106] ROUAULT - MARIA 2010, 8.

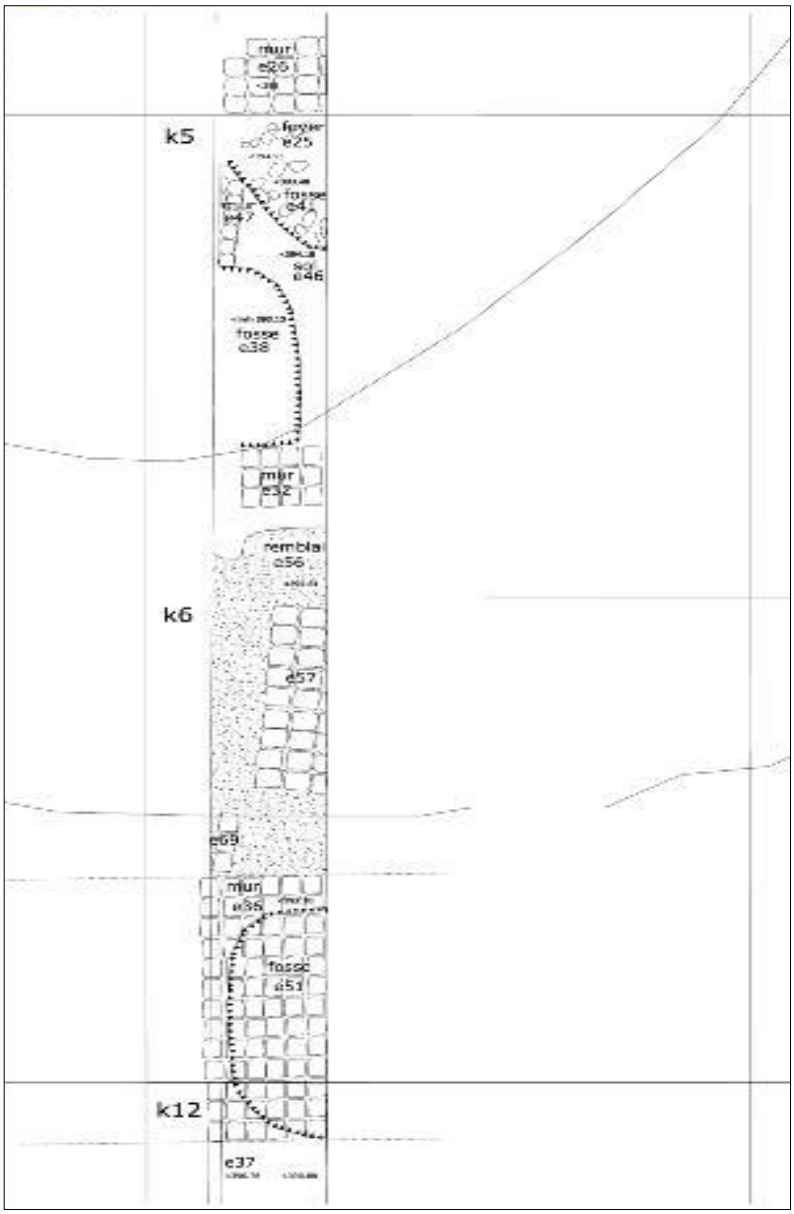


Fig. 15, plan of Area A, K.5 and K.6, after, ROUAULT- MARIA 2010, 26.

On level 1, in trench K6 (Fig.15), the slope appears to be less compact, the surface layers of colluvium e27 and e33 were deposited over a relatively compact surface and platform (e34). On the surface of the area parallel bands of lighter brown, compact, muddy soil was visible after the first cleaning, especially after heavy rains, which suggested the presence of parallel structures, such as walls with undetermined dating, but one can assume that due to the closeness of to the surface, they are perhaps recent.[107]

[107] ROUAULT - MARIA 2010, 8.

Under the colluvium, we have identified a sort of platform built of blocks of clay (about 4x1 m), oriented northeast-southwest, which covered a filling layer (e56).

Due to all related material, proximity to the surface, and association with a fireplace, a tannur (e53), this floor (e57) with a maximum height of 393,83 m, dated back to the early Islamic period, and was intrusive to the ruins of the eroded Neo-Assyrian level. Where it was preserved it was visible that it lay directly on the fill layer (e56), but the Islamic level also covered the large wall (e36) at the end of the slope before it was eroded.

The great wall e36, which had a width of over 6 m, had its southern limit located in K12, and was built using mudbricks (40x40x8cm). It was first recognized in the western part of the trench. The foundation layer (e56) reached next to its northern face, but another mudbrick wall (e68) was also identified, oriented northwest-southeast, which could also be associated with the wall mentioned above. Perhaps this was its most recent phase. The top of the wall of the trench has been disrupted by a large pit e51 with a depth of 392,49 m, and with the argillaceous and hard filling with inclusions of pebbles. (Fig. 17) Because of its dimensions, the quality of the building, its position on the slope and orientation, it is likely that the wall e36 could serve as a kind of supporting wall, perhaps for an enclosure. This trench of iron age II-III made a limitation of the time periods covered by the excavation.[108]

In trench 6 one space was identified as an open space or kitchen, based on the pottery coming from this surface. The 12 sherds found were parts of cooking pots and pot-stands, and could be used in a space of food-processing.

On level 2 of trench K5 the south side of wall e26 and its upper part were discovered, which were burned by the fireplace (stove) of e25, which is now almost near the surface of the tell, in the northern part of the K5. (Fig.15) It was also surrounded by ceramics dating from Neo-Assyrian period. The remains of this times were clearly visible in the section, perhaps a vestige of a kiln built by ceramics was also present in this level (e15, e18), which partially closed a large pit (e41). Its filling was partially intrusive in a clay layer, the compact layer of e54 contained a collection of ceramics from the Neo-Assyrian period, for example complete vessels as supports and high jars with cylindrical form. The pit e41 is very deep with its 393,81 m depth

[108] ROUAULT - MARIA 2010, 9.

and interfered with the floor built by an installation of mudbricks (e46), which cut the mudbrick wall e47 which is oriented northeast-southwest. More to the south, on the slope, another large pit e38 was visible which destroyed the floor e46, as well as the northern side of wall e32.[109]

In trench 5 two loci was distinguished. The first one could be identified as a kitchen according to a stove found with cooking pots and serving vessels next to it. The other one, located in the northern part served as a workshop yard indicated by slags and remains of ashes.

In trench O13 located in area B, on level 2 the excavations went deeper and unearthed two walls (A and B) with the floor A. Here a few ceramics were found, and the floor itself was covered with gravel stone and sand. The second floor (B), which pre-dates floor A, belonged to a wall which extended from the north to the south.[110] (Table 2-D and 8-A) Only a small number of sherds originated in this trench, and it shows that the features had a domestic function and were parts of a household. The graves found belonged to the Late Islamic period, and destroyed the Neo-Assyrian clear level. (Fig.16)

[109] ROUAULT - MARIA 2010, 8.
[110] AL-FAHDAWI 2010, 6.

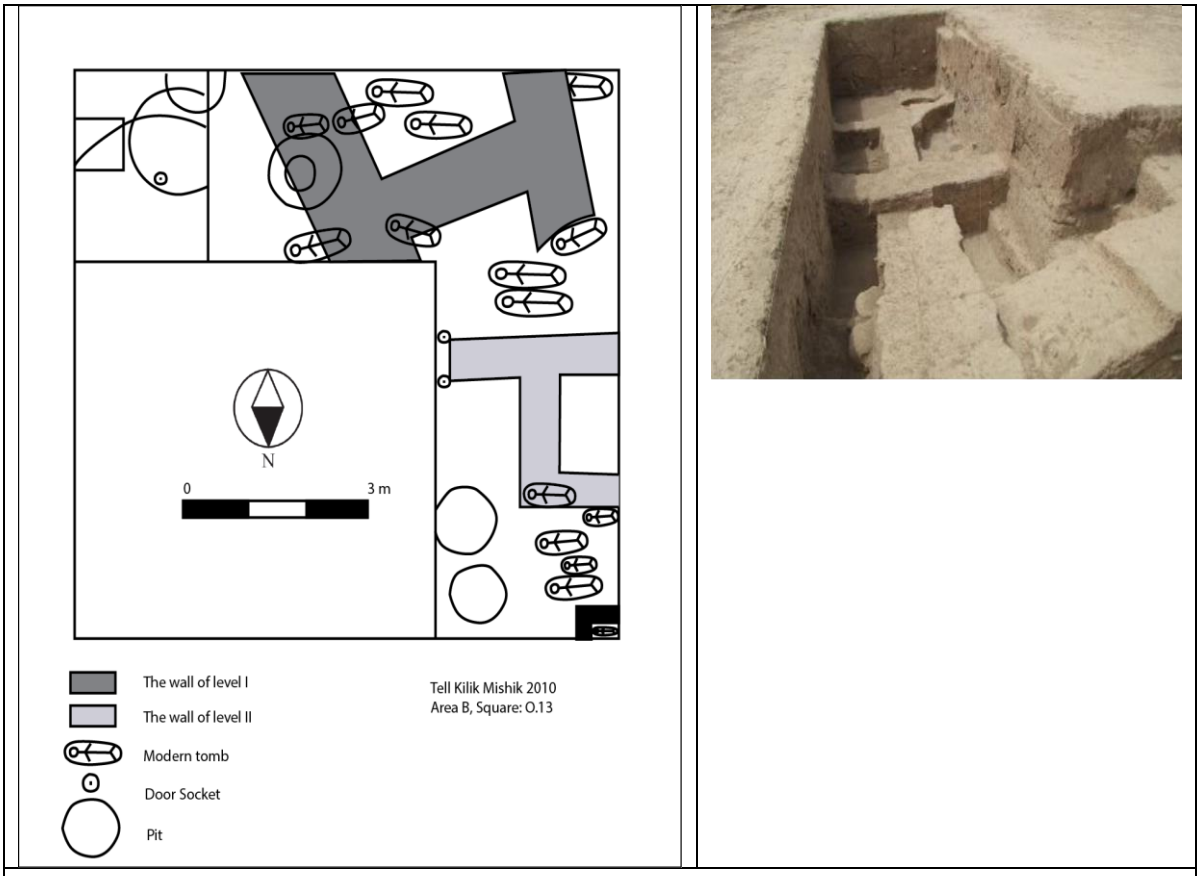


Fig.16, Area B with levels, after, AL-FAHDAWI 2010, 11.

In area C trench K2 was located south of the tell. On level 1 the floor Ce002 was observed, but due to the construction of a military building it was destroyed completely. Floor Ce003 and Ce016 was found in this trench, but their function is unknown for only a few cermaic pieces were found here.

In area C on the third level of K10 and K11 two floors (Ce021 and Ce053) was unearthed in the south. The floors lay between the wall Ce026 in the north and the wall Ceo21 in the south. Furthermore, a tannur (Ce035) was located on floor Ce053 and wall Ce046 on the southern part of the trench. These features indicate and open space with a domestic function. It appears that this place was used as a dining area based on the found pottery. (Fig.17)

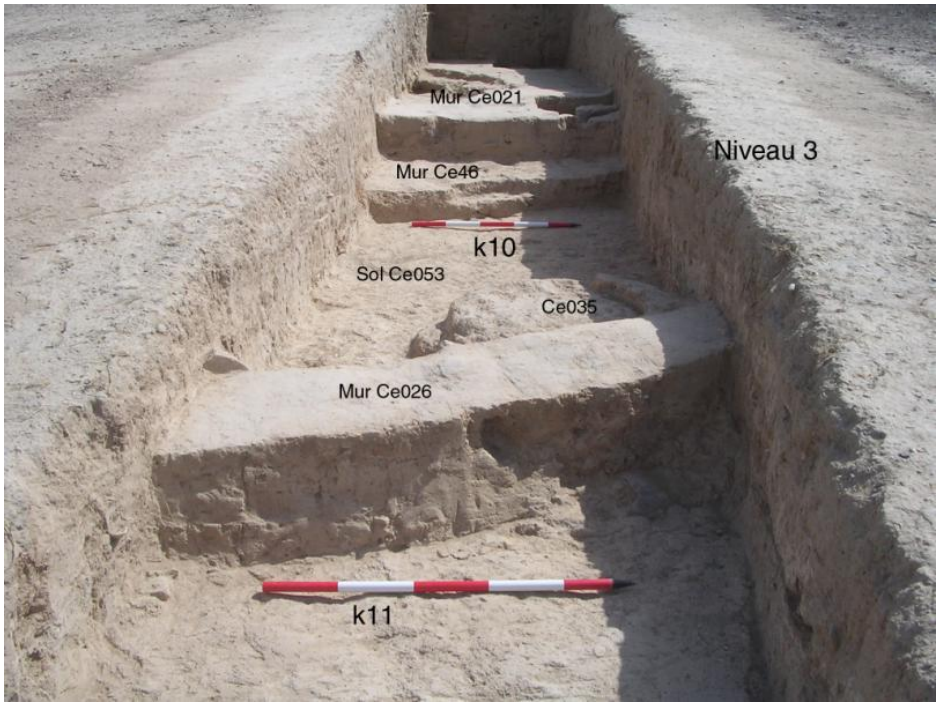


Fig.17: Area C, trench K10, K11, After, ROUAULT - MARIA 2010, 35.

Trench K16, K17 and K7 belonged to area C. On level 5 in all of them a floor and four walls from mudbricks were found. A large tannur and a stove was found as well. A noticeable change was visible in trench K7, where the oldest layers from level 5 appeared to be razed to the ground and leveled. Level 4 provided more information about the architectural features of the area. Big structures oriented to north-south were found, for example: wall Ce048 and Ce083, Ce064, Ce046. The wall identified as Ce048 had approximately 3 lines of reddish-brown mudbrick, had a length of 4.90 m and a width of 1.38 m.

In trench K17 an east-west oriented wall appeared (Ce064). To the east, the two structures Ce083 and Ce048 bordered a room, an open space or a street. We can assume that wall Ce064 served as a limit of spaces k16 and k17.

A door, or more specifically the angle of the door, was preserved in situ, which provided a passage between space k16 and k17. The associated floor with these structures was Ce034, with a height of 395.55 m, is conserved only close to the door and not in the trench k16 and k17, for it was carried away by the colluvium and by erosion (layer Ce016).

Wall Ce046 was the south border of the open space running from north to south. Although this space has not been excavated, a tannur was found suggesting a

domestic function. Wall Ce046 has not been completely excavated over its entire length, or across its entire width or height, but it is possible to assume that it is the northern limit of another house, and its orientation appears slightly different from the structures that situated more to the north.

In the north, in trench K7, wall Ce027 has been cut off at its northern part by the passage of the entrance and by the colluvium deposits. The wall Ce027 was oriented north-south, and joined the wall Ce083 which was situated south and was oriented east-west, forming another part extending in the northern part of k17. To the east of Ce027 the space k16 has continued uninterrupted in the northern direction.[111]

In trench K7 the occupation layers underwent a complete razing during the implantation of structures of layer 4. The only remaining section of the wall Ce037, was visible in the southern section on the esstern and western part of the trench with two preserved rows of brownish-red mudbricks. The pottery from the leveling layers (Ce028 and Ce055) above Ce037 are hard to date due to the disturbance of the level. This trench provided around thirteen ceramic sherds, such as the most popular drinking vessel forms, which suggest that the space was used as a dining yard.[112] (Fig.18)

[111] ROUAULT - MARIA 2010, 15.
[112] ROUAULT - MARIA 2010, 15.

Fig.18, Area C, level 4, trench K.16, 17 and 7, after ROUAULT - MARIA 2010, 34.

In trench M7, in level 1 just a few samples of pottery were found, and only small excavation works were carried out.[113] (Fig.19) Three archaeological phenomena could be observed. The first one, an open space located in the north, the second one was a courtyard approximately in the middle, and the third one was a room of a house located in the south. Unfortunately, no pottery was preserved from this trench.

[113] IBRAHIM 2011, 9.

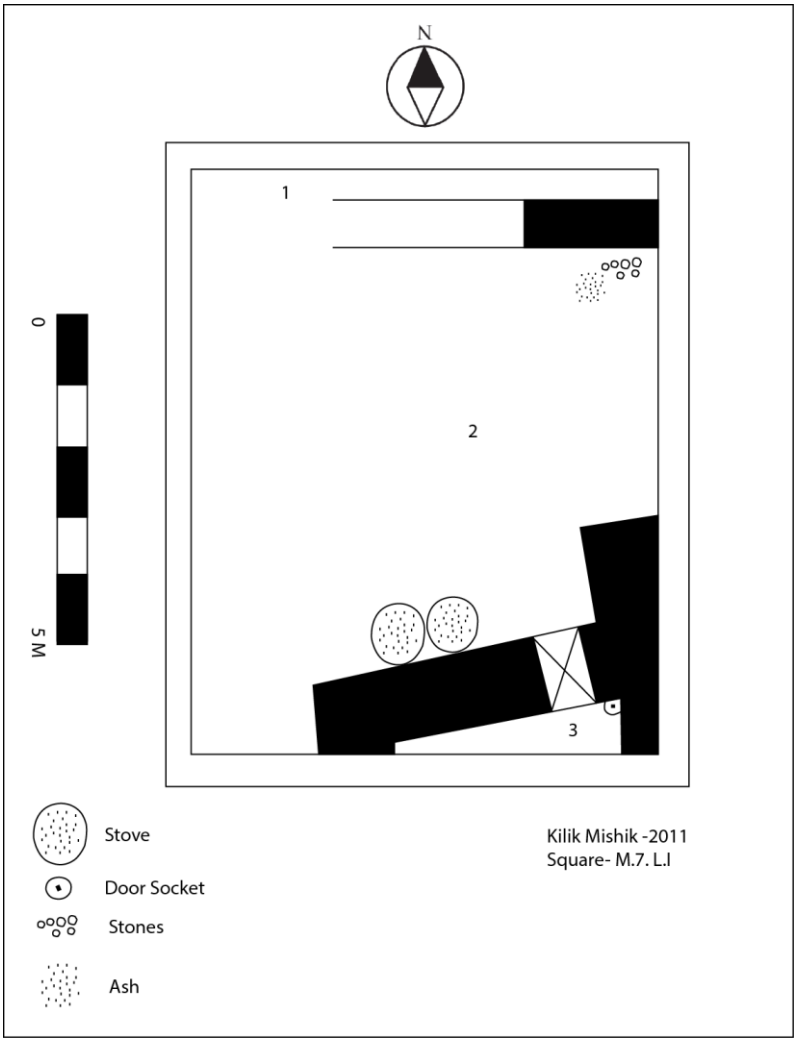


Fig. 19, level I of Trench M.7, after IBRAHIM 2011, 18

On level 2 in the same trench seven loci was distinguished. The first structure northernmost was a wall, but its limits could not be determined for it continues outside the trench as well. Next to it, still in the northern part of the trench a non-clear wall was recognized. Locus three belonged to a room, space four was an alley between the east and west sections, and space six perhaps served as a court. The western sections included three spaces, which may be identified as rooms of a house. The first of these appeared to be a living room, due to its closed gate and an excavated stove in the north-western corner. Space five included a stove in its center and it also seems to be identifiable as a separate room. Behind this room there was locus seven, which can be described as an individual room as well.

In general, in locus three many fragments of small and medium sized storage jars have been found, which identifies locus three as a storage room.[114] (Fig. 20).

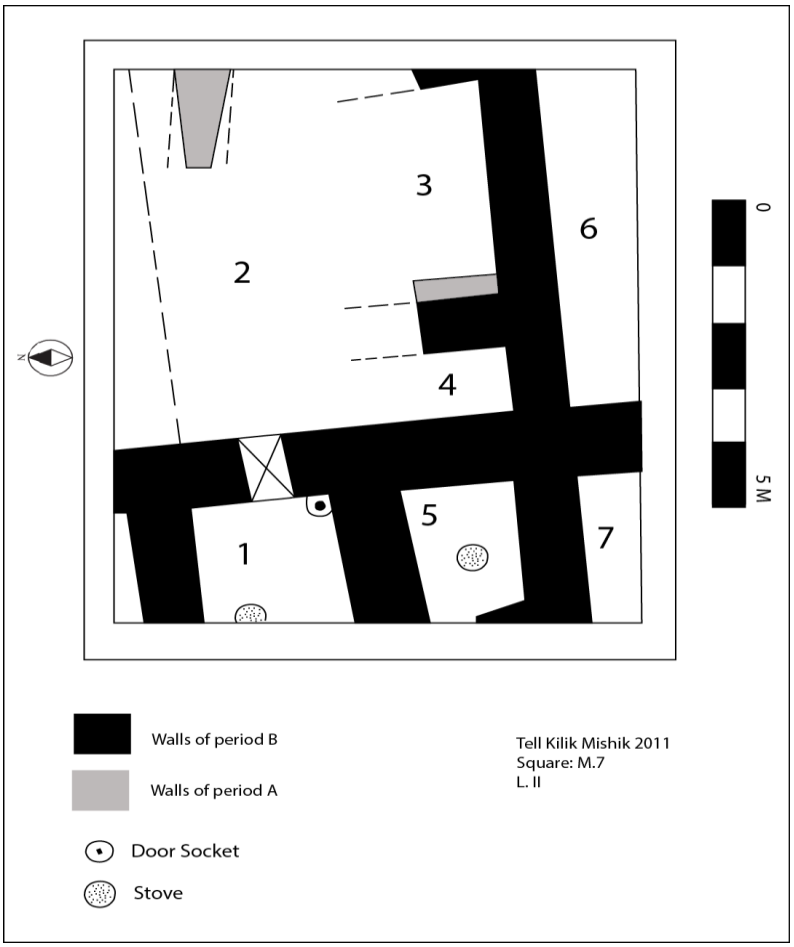


Fig. 20, level II of Trench M.7, after IBRAHIM 2011, 19.

Level 1 in trench L7, which was opened on the top f the tell to connect two previously excavated trenches, approximately 20-30 cm deep remains of broken bricks and stones were found, leading the team to suggest that this may have been some kind of pavement[115]. Another option is that it is a continuation of a not well-preserved wall.

In the eastern part of the trench, there was a wall made from mud-bricks and clay, with a length of 2,9 m, and width of 1 m. There were also some other sections of the building, but the rest of the wall was covered by the mudbricks and bricks.[116] The excavation in this trench provided an unknown structure but also a considerable

[114] IBRAHIM 2011, 10.
[115] IBRAHIM 2012, 3.
[116] IBRAHIM 2012, 10.

number of ceramic sherds, approximately around 64 sherds, which helped to determine the function of this locus as a dining space. (Fig 21)

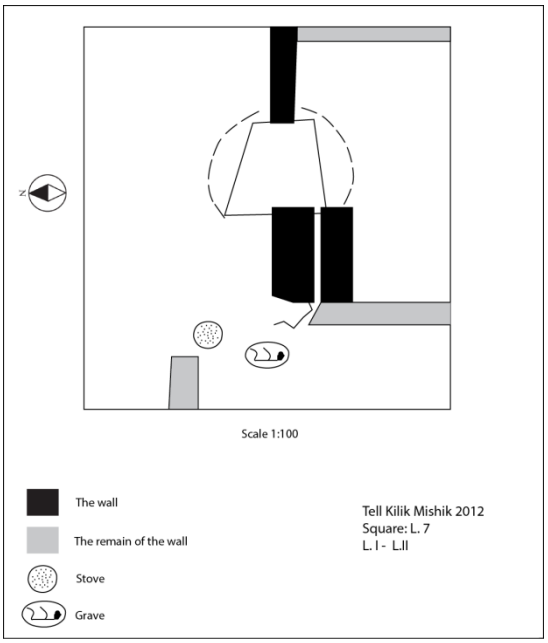


Fig. 21, Trench L7, Level I.

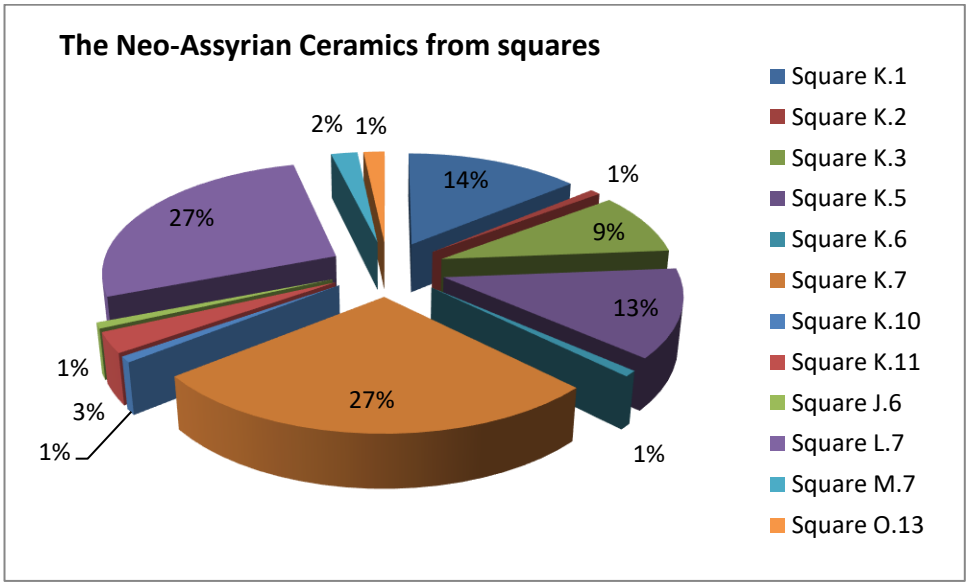
In trench J6, which is located on the north-western slope of the tell, on level 1 the remains of two layers were uncovered. (Fig.24) The floor was covered by small pebbles, which clearly indicates that this was not a regular floor, because the remains of big stones were found on this floor and spread randomly amongst the remains of some of the destroyed graves. Furthermore, a structure with unknown function was discovered, which provided only a few pottery sherds, and the vessels may suggest that it was used as a dining space.[117] (Fig. 13)

Finally, all the areas and trenches are demonstrated in the Table 2 and graph.2.

[117] IBRAHIM 2012, 7.

Neo-Assyrian												
Trench	Level	Function of the loci	Basin	Plate	Bowl	Goblet	Pot	Jar	Pot-stand	Strainer	Body sherd	Total
K1 A	1	Open space	1		9		3	17	1	1	1	33
K2 C	1	Unknown space						1				1
K11	3	Dining space			2		2	3				7
K10	3	Dining space						2				2
K3 A	1	Dining space			7	1	1	10	2			21
K5 A	1	Kitchen and workshop space	1		5	1	6	17				30
K6 A	1	Kitchen			2		2	4	2		2	12
K7 C	5	Dining space			3	4	1	5				13
J6	1	Dining space				1		1				2
L7	1	Dining space			15	5	3	17			16	56
M7	2	Storage and household space					1	2	3			5
O13	2	Household space			1			1	1		1	4
Total			2		48	12	19	94	8	1	20	194

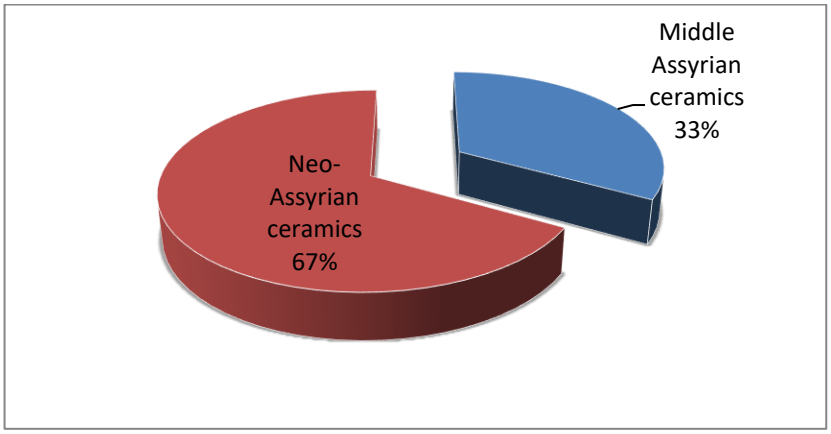
Table 2: The Neo-Assyrian levels at Kilik Mishik



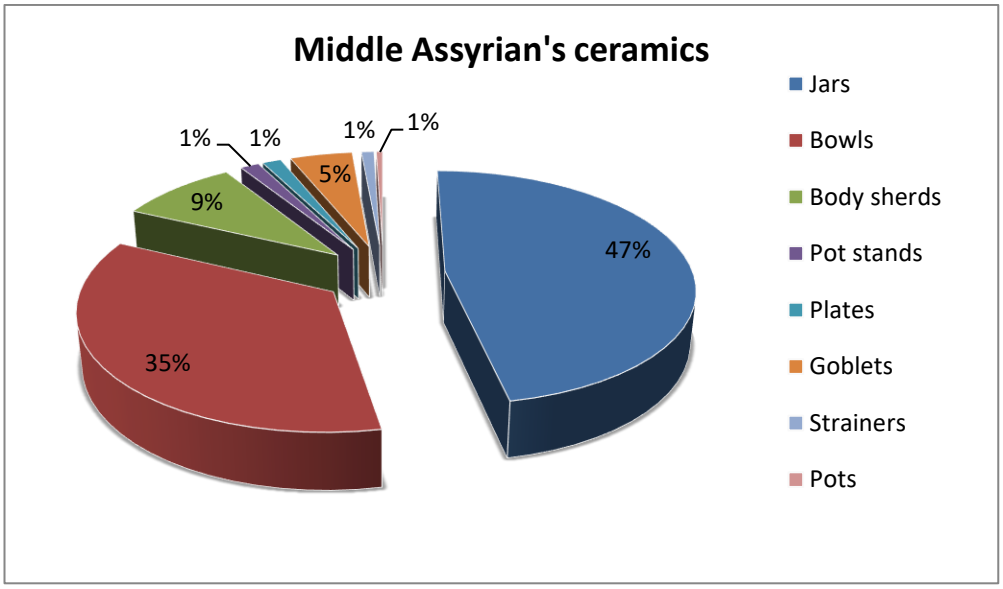
Graph.2: The Neo-Assyrian ceramics from all the trenches

4.2.4. The ceramics

Tell Kilik Mishik provided approximately 254 Middle and Neo-Assyrian pottery sherds and complete vessels (Graph.3) From these pieces 69 sherds could be dated to the Middle Assyrian period. (Table. 3 and Graph 4) Though, the Neo-Assyrian ceramics are way more presented, with around 194 sherds of complete and non-complete vessels. (Table.4 and Graph 5)



Graph.3: The Middle and Neo-Assyrian ceramics

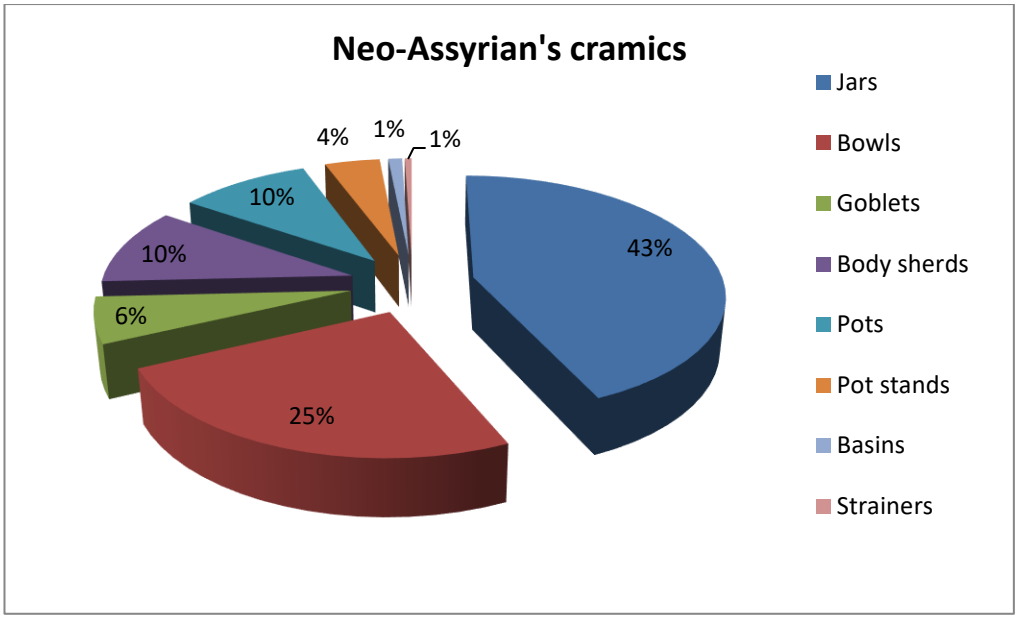


Graph 4: Middle Assyrian ceramics from Tell Kilik Mishik

No	Sherds	Trench	Levels	shapes	Datation
1.	2011-50	K.7	1A	Body sherd	MA
2.	2012-07	L.7	2	jar	MA
3.	2011-43	K.7	1A	Body sherd	MA
4.	2011-44	K.7	1A	Body sherd	MA
5.	2011-45	K.7	1A	Body sherd	MA
6.	2011-46	K.7	1A	Body sherd	MA
7.	2011-47	K.7	1A	Body sherd	MA
8.	2011-48	K.7	1A	Body sherd	MA
9.	2011-49	K.7	1A	Body sherd	MA
10.	2011-51	K.7	1A	Body sherd	MA
11.	2011-52	K.7	1A	Body sherd	MA
12.	2011-53	K.7	1A	Body sherd	MA
13.	2011-54	K.7	1A	jar	MA
14.	2011-55	K.7	1A	goblet	MA

No	Sherds	Trench	Levels	shapes	Datation
15.	2011-56	K.7	1A	bowl	MA
16.	2011-57	K.7	1A	bowl	MA
17.	2011-58	K.7	1A	jar	MA
18.	2011-59	K.7	1A	jar	MA
19.	2011-60	K.7	1A	bowl	MA
20.	2011-61	K.7	1A	bowl	MA
21.	2011-62	K.7	1A	jar	MA
22.	2011-63	K.7	1A	jar	MA
23.	2011-64	K.7	1A	bowl	MA
24.	2011-65	K.7	1A	bowl	MA
25.	2011-66	K.7	1A	bowl	MA
26.	2011-67	K.7	1A	jar	MA
27.	2011-68	K.7	1A	jar	MA
28.	2011-69	K.7	1A	jar	MA
29.	2011-70	K.7	1A	bowl	MA
30.	2011-71	K.7	1A	bowl	MA
31.	2011-72	K.7	1A	jar	MA
32.	2011-73	K.7	1A	jar	MA
33.	2011-74	K.7	1A	bowl	MA
34.	2011-75	K.7	1A	bowl	MA
35.	2011-76	K.7	1B	goblet	MA
36.	2011-77	K.7	1B	goblet	MA
37.	2011-78	K.7	1B	goblet	MA
38.	2011-79	K.7	2	strainer	MA
39.	2011-80	K.7	2	jar	MA
40.	2011-2	K.7	1B	jar	MA
41.	2011-3	K.7	1B	jar	MA
42.	2011-4	K.7	1A	jar	MA
43.	2011-5	K.7	1A	goblet	MA
44.	2011-6	K.7	2A	goblet	MA
45.	2011-7	K.7	2b	goblet	MA
46.	2011-8	K.7	2b	goblet	MA
47.	2011-9	K.7	2a	jar	MA
48.	2011-14	K.7	1B	jar	MA
49.	2011-15	K.7	2	Body sherd	MA
50.	2011-16	K.7	2	jar	MA
51.	2011-20	K.7	2	handle	MA
52.	2011-27	K.7	2	jar	MA
53.	2011-28	K.7	1B	burial pot	MA
54.	2011-30	K.7	1A	pot stand	MA
55.	2011-31	K.7	2	jar	MA
56.	2011-32	K.7	2	jar	MA
57.	2011-33	K.7	2	jar	MA
58.	2011-34	K.7	2	jar	MA
59.	2011-35	K.7	2	jar	MA
60.	2011-36	K.7	2	jar	MA
61.	2011-37	K.7	2-3	bowl	MA
62.	2011-42	K.7	1A	jar	MA
63.	2012-01	L.7	2	goblet	MA
64.	2012-02	L.7	2	jar	MA
65.	2012-03	L.7	2	jar	MA
66.	2013-01	J.6	2	pot stand	MA
67.	2013-04	L.7	2	strainer	MA
68.	2013-07	J.6	2	jar	MA

Table. 3. The Middle Assyrian ceramics from Tell Kilik Mishik



Graph. 5: Neo-Assyrian ceramics from Tell Kilik Mishik

No	Sherds	Trenches	Lots	Levels	shapes	Datation
1.	552	K5	A055	1	jar	NA
2.	556	K5	A044	1	pot	NA
3.	557	K5	A044	1	jar	NA
4.	558	K5	A044	1	jar	NA
5.	559	K5	A044	1	jar	NA
6.	560	K5	A044	1	bowl	NA
7.	561	K5	A044	1	pot	NA
8.	562	K5	A018	1	jar	NA
9.	564	K5	A018	1	jar	NA
10.	565	K5	A018	1	jar	NA
11.	566	K1	A031	1	bowl	NA
12.	567	K1	A031	1	bowl	NA
13.	576	K1	A031	1	jar	NA
14.	577	K1	A031	1	bowl	NA
15.	544	K3	A046	1	bowl	NA
16.	545	K3	A046	1	jar	NA
17.	546	K3	A046	1	jar	NA
18.	547	K3	A046	1	bowl	NA
19.	512	K11	C045	3	jar	NA
20.	513	K11	C045	3	pot	NA
21.	549	K5	A044	1	jar	NA
22.	550	K5	A044	1	jar	NA
23.	551	K5	A044	1	pot	NA
24.	578	K1	A031	1	jar	NA
25.	579	K1	A031	1	strainer	NA
26.	580	K1	A031	1	bowl	NA
27.	581	K1	A031	1	jar	NA
28.	583	K3	A078	1	jar	NA
29.	584	K3	A078	1	pot stands	NA
30.	585	K3	A078	1	jar	NA
31.	586	K3	A078	1	pot	NA
32.	592	K3	A041	1	bowl	NA
33.	595	K3	A041	1	pot stands	NA

No	Sherds	Trenches	Lots	Levels	shapes	Datation
34.	596	K3	A041	1	goblet	NA
35.	597	K6	A067	1	pot	NA
36.	598	K6	A067	1	pot stands	NA
37.	600	K6	A067	1	jar	NA
38.	601	K6	A067	1	pot	NA
39.	603	K6	A067	1	jar	NA
40.	604	K6	A067	1	body sherd	NA
41.	605	K6	A067	1	body sherd	NA
42.	607	K6	A067	1	pot stands	NA
43.	608	K6	A067	1	bowl	NA
44.	609	K6	A067	1	jar	NA
45.	610	K6	A067	1	bowl	NA
46.	618	K6	A067	1	jar	NA
47.	619	K11	C038	3	pot	NA
48.	624	k11	C038	3	bowl	NA
49.	625	K11	C038	3	jar	NA
50.	626	K11	C038	3	bowl	NA
51.	630	K11	C038	3	jar	NA
52.	634	K7	C067	5	goblet	NA
53.	635	K7	C067	3	bowl	NA
54.	638	K7	C068	5	bowl	NA
55.	639	K7	C068	5	bowl	NA
56.	641	K7	C068	5	jar	NA
57.	642	K7	C068	5	goblet	NA
58.	643	K7	C068	5	goblet	NA
59.	644	K7	C053	5	goblet	NA
60.	645	K7	C053	5	jar	NA
61.	646	K10	C046	1	jar	NA
62.	647	K10	C046	1	jar	NA
63.	655	K7	C066	5	jar	NA
64.	664	K7	C056	5	jar	NA
65.	665	K7	C056	5	jar	NA
66.	216	K3	A013	1	jar	NA
67.	217	K3	A013	1	jar	NA
68.	218	K3	A013	1	bowl	NA
69.	219	K3	A013	1	jar	NA
70.	409	K1	A012	1	pot stands	NA
71.	398	K5	A027	1	pot	NA
72.	399	K5	A027	1	jar	NA
73.	400	K5	A027	1	jar	NA
74.	401	K5	A027	1	bowl	NA
75.	402	K5	A027	1	bowl	NA
76.	403	K5	A027	1	jar	NA
77.	404	K5	A027	1	Jar	NA
78.	486	K3	A034	1	bowl	NA
79.	487	K3	A034	1	bowl	NA
80.	220	K3	A013	1	jar	NA
81.	221	K3	A013	1	bowl	NA
82.	222	K3	A013	1	jar	NA
83.	663	K7	C056	5	pot	NA
84.	346	K5	A027	1	basin	NA
85.	347	K5	A027	1	jar	NA
86.	723	K5	A075	1	goblet	NA
87.	724	K5	A075	1	bowl	NA
88.	725	K5	A075	1	jar	NA
89.	726	K5	A075	1	bowl	NA
90.	800	K5	A082	1	jar	NA
91.	801	K5	A082	1	jar	NA

No	Sherds	Trenches	Lots	Levels	shapes	Datation
92.	802	K5	A082	1	pot	NA
93.	803	K5	A082	1	pot	NA
94.	223	K3	A013	1	jar	NA
95.	2	K1	A001	1	jar	NA
96.	3	K1	A001	1	bowl	NA
97.	6	K1	A001	1	jar	NA
98.	9	K1	A001	1	pot	NA
99.	17	K1	A001	1	jar	NA
100.	22	K1	A001	1	body sherd	NA
101.	29	K1	A001	1	jar	NA
102.	31	K1	A001	1	bowl	NA
103.	32	K1	A001	1	jar	NA
104.	40	K1	A001	1	jar	NA
105.	47	K1	A001	1	pot	NA
106.	50	K1	A001	1	jar	NA
107.	52	K1	A001	1	jar	NA
108.	54	K1	A001	1	jar	NA
109.	59	K1	A001	1	jar	NA
110.	66	K1	A001	1	bowl	NA
111.	80	K1	A001	1	jar	NA
112.	81	K1	A001	1	bowl	NA
113.	141	K2	C002	1	jar	NA
114.	150	K1	A006	1	jar	NA
115.	151	K1	A006	1	jar	NA
116.	152	K1	A006	1	basin	NA
117.	153	K1	A006	1	pot	NA
118.	154	K1	A006	1	bowl	NA
119.	155	K1	A006	1	jar	NA
120.	2011-81	M.7		**2**	pot stand	**NA**
121.	2011-82	M.7		**2**	pot	**NA**
122.	2012-83	L.7		**1**	jar	**NA**
123.	2012-84	L.7		1	jar	NA
124.	2012-85	L.7		1	bowl	NA
125.	2012-87	L.7		1	jar	NA
126.	2012-88	L.7		1	goblet	NA
127.	2012-89	L.7		1	jar	NA
128.	2012-90	L.7		1	bowl	NA
129.	2012-92	L.7		1	bowl	NA
130.	2012-93	L.7		1	jar	NA
131.	2012-94	L.7		1	goblet	NA
132.	2012-95	L.7		1	jar	NA
133.	2012-96	L.7		1	pot	NA
134.	2012-97	L.7		1	pot	NA
135.	2012-98	L.7		1	body sherd	NA
136.	2012-99	L.7		1	bowl	NA
137.	2012-100	L.7		1	body sherd	NA
138.	2012-101	L.7		1	body sherd	NA
139.	2012-102	L.7		1	jar	NA
140.	2012-103	L.7		1	jar	NA
141.	2012-104	L.7		1	jar	NA
142.	2012-105	L.7		1	bowl	NA
143.	2012-106	L.7		1	jar	NA
144.	2012-107	L.7		1	jar	NA
145.	2012-108	L.7		1	body sherd	NA
146.	2012-109	L.7		1	bowl	NA
147.	2012-110	L.7		1	bowl	NA
148.	2012-111	L.7		1	bowl	NA
149.	2010-04	O.13		2	jar	NA

No	Sherds	Trenches	Lots	Levels	shapes	Datation
150.	2012-112	L.7		1	bowl	NA
151.	2012-113	L.7		1	bowl	NA
152.	2012-114	L.7		1	bowl	NA
153.	2012-115	L.7		1	bowl	NA
154.	2012-116	L.7		1	body sherd	NA
155.	2012-117	L.7		1	body sherd	NA
156.	2012-118	L.7		1	body sherd	NA
157.	2012-119	L.7		1	body sherd	NA
158.	2012-120	L.7		1	body sherd	NA
159.	2012-121	L.7		1	body sherd	NA
160.	2012-122	L.7		1	body sherd	NA
161.	2012-123	L.7		1	body sherd	NA
162.	2012-124	L.7		1	body sherd	NA
163.	2012-125	L.7		1	body sherd	NA
164.	2012-126	L.7		1	goblet	NA
165.	2012-128	L.7		1	goblet	NA
166.	2012-129	L.7		1	bowl	NA
167.	2012-131	L.7		1	jar	NA
168.	2012-132	L.7		1	bowl	NA
169.	2012-133	L.7		1	bowl	NA
170.	2012-134	L.7		1	bowl	NA
171.	2012-136	L.7		1	jar	NA
172.	2012-137	L.7		1	goblet	NA
173.	2012-138	L.7		1	jar	NA
174.	2012-139	L.7		1	bowl	NA
175.	2012-140	L.7		1	jar	NA
176.	2012-141	L.7		1	pot	NA
177.	2012-142	L.7		1	jar	NA
178.	2012-143	L.7		1	jar	NA
179.	2012-144	L.7		1	jar	NA
180.	2012-145	L.7		1	jar	NA
181.	2012-146	L.7		1	bowl	NA
182.	2012-147	L.7		1	jar	NA
183.	2012-148	L.7		1	bowl	NA
184.	2012-149	L.7		1	body sherd	NA
185.	2012-150	L.7		1	body sherd	NA
186.	2012-135	L.7		1	jar	NA
187.	2011-11	M.7		2	jar	NA
188.	2011-29	M.7		2	pot stand	NA
189.	2011-41	M.7		2	jar	NA
190.	2013-03	J.6		1	goblet	NA
191.	2013-10	J.6		1	jar	NA
192.	2010-03	O.13		2	bowl	NA
193.	2010-1a	O.13		2	pot stand	NA
194.	2010-1b.3	O.13		2	body sherd	NA

Table.4. the Neo-Assyrian ceramics from Tell Kilik Mishik

4.3 Excavations at the Sheikhi Choli tomb

On the 18th of March in 2017, the Directorate General of Antiquities and the Directorate of Antiquities and Heritage of Erbil found an Assyrian vaulted tomb near to the mosque of Sheikhi Choli in the Arab quarter of Erbil (Fig.22). The tomb was found by workers about 5 m below the street level during the construction of a commercial building.[118]

The tomb is located in the ancient city of Erbil, in the Arab quarter, close to the Sheikhi Choli Mosque. The attached photo pinpoints the precise location of the tomb, which is indicated both on the Corona 1951 and on the Digital Globe Quick bird (9 June 2004). (Fig.22) The tomb is approximately 1 km away from the center of the Erbil citadel, and it is located in its lower town. In the opposite direction, it lies 650 m from the minaret of Mudzaffariyya**.**

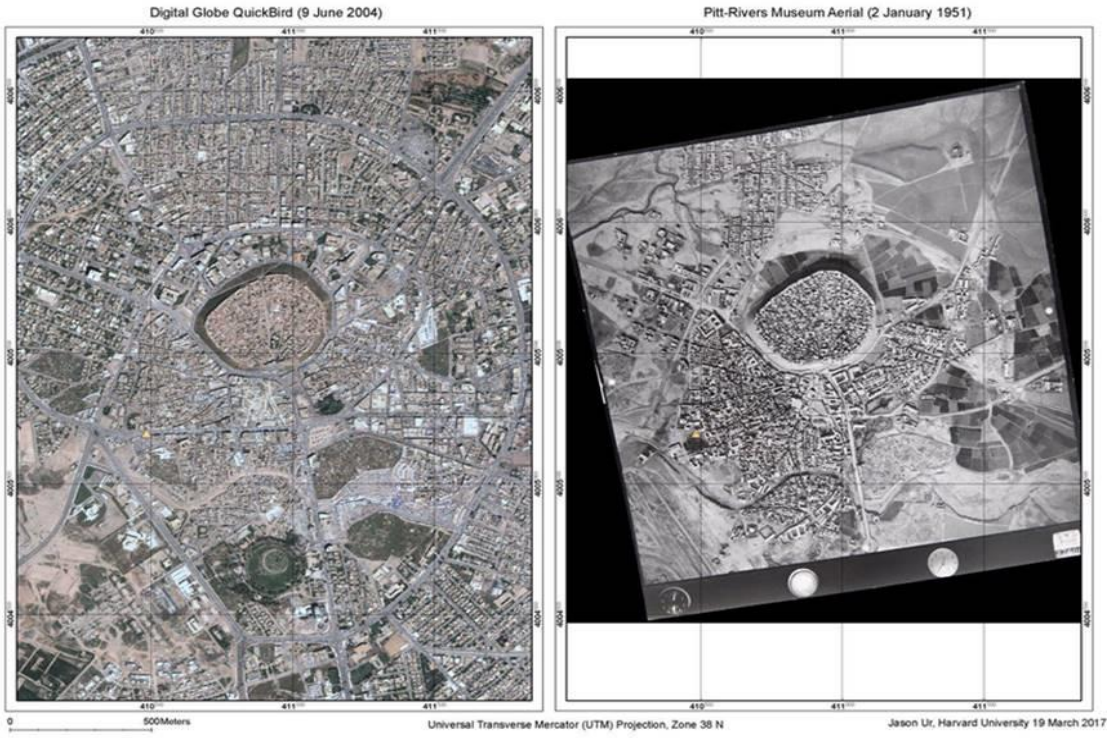


Fig.22, The location of Sheikhi Choli Vaulted Tomb, after (UR – KAHLIL. EPAS Project, 2017)

After Mr. Nader Babakr Mohammad (Director of Directorate of Erbil Antiquities) had been informed about the vaulted tomb found on the 18th of March

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2017, he immediately formed a team led by Mr. Goran Mohammad (Archaeologist and head of the Excavation Department of the Directorate of Erbil Antiquities).[119]

4.3.1. Context

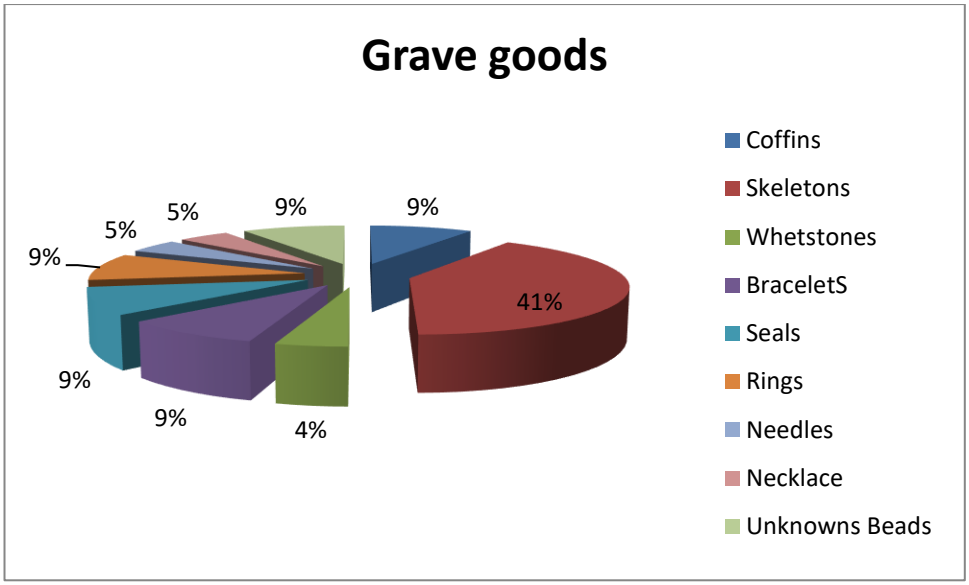
Fig. 23. Sheikhi Choli Tomb. The photo was taken by the Directorate of Antiquities team of Erbil.

The main aim of the excavation was to rescue the remains and finds, as well as to document the archaeological situation and layout. First of all, they excavated the entrance which was uncovered during the completion of foundation works for a commercial building. The architectural work helped the team to clean the entrance of the vaulted tomb to start the excavation.

The archaeologists' unearthed two ceramic coffins and nine skeletons, with a large number of complete and non-complete pottery vessels placed both between them as well as around them. Furthermore a collection of other objects were found: one whetstone, two lapis lazuli bracelets and two bronze bracelets, a bronze and an ivory ring, two necklaces, ivory beads, two black stone seals, a needle, and some beads of unknown use were found.[120] (Graph.6)

[119] The team included Qadri Ali (Archaeologist from the Erbil Civilization museum), Khalil Ali (Archaeologist from Directorate of Erbil Antiquities), Shuwan Ahmed (Archaeologist from Directorate of Erbil Antiquities) and Rozhgar Rashid (Archaeologist from Directorate of Erbil Antiquities).

[120] OTHMAN 2017, 208



Graph 6: The types of grave goods

Despite the difficult circumstances, the archaeologists could document the site perfectly and rescue all the remains. Moreover, the vaulted tomb could be preserved under the commercial building, which the owner of the site and the Directorate of Erbil are planning to turn into a museum.

The tomb has a typical middle Assyrian vaulted form with a barrel vault.[121] The curve of the vault was built from bricks (40x40x12 cm), and its arc started on the floor. The chamber itself is narrow, and has a semi-trench layout of a 0,3x2,2 m size.[122] (Fig.24)

[121] E.g. Gruft 37 = Ass 13707 (Haller 1954, 114–115, Abb. 148; Pedde 2015, 73–74, Taf. 14–15).
[122] The others types of grave goods will be publish elsewhere; I only have the permission to examine the ceramics.

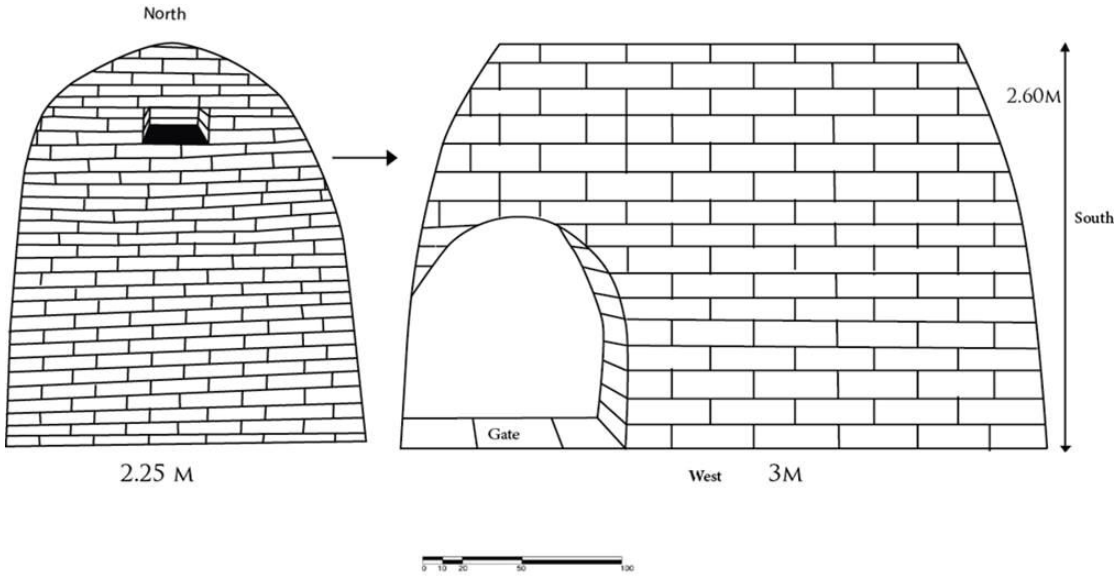


Fig. 24. The gate of the vaulted tomb with its sections and measurements. Drawn by Othman Abdullah

The chamber consists of three niches: one in the northern section, one in the eastern and one in the western part, but the third is not of the same height as the previous ones. The bones were scattered all over the tomb, except the two bodies which were preserved by their coffins. Unfortunately, all the bones were mixed but nine human skeletons could be distinguished, from which three could be clearly identified: the two found intact in the coffins, and one in the north-eastern part separated with three vertical standing bricks. The rest of the skeletons were highly disturbed and lay approximately in the middle of the chamber. (Fig.25) Both the pottery and the other finds were lying between and all around the skeletons, also rather disturbed.[123]

[123] PEDDE 2015, 48, Plate 52, A-D.

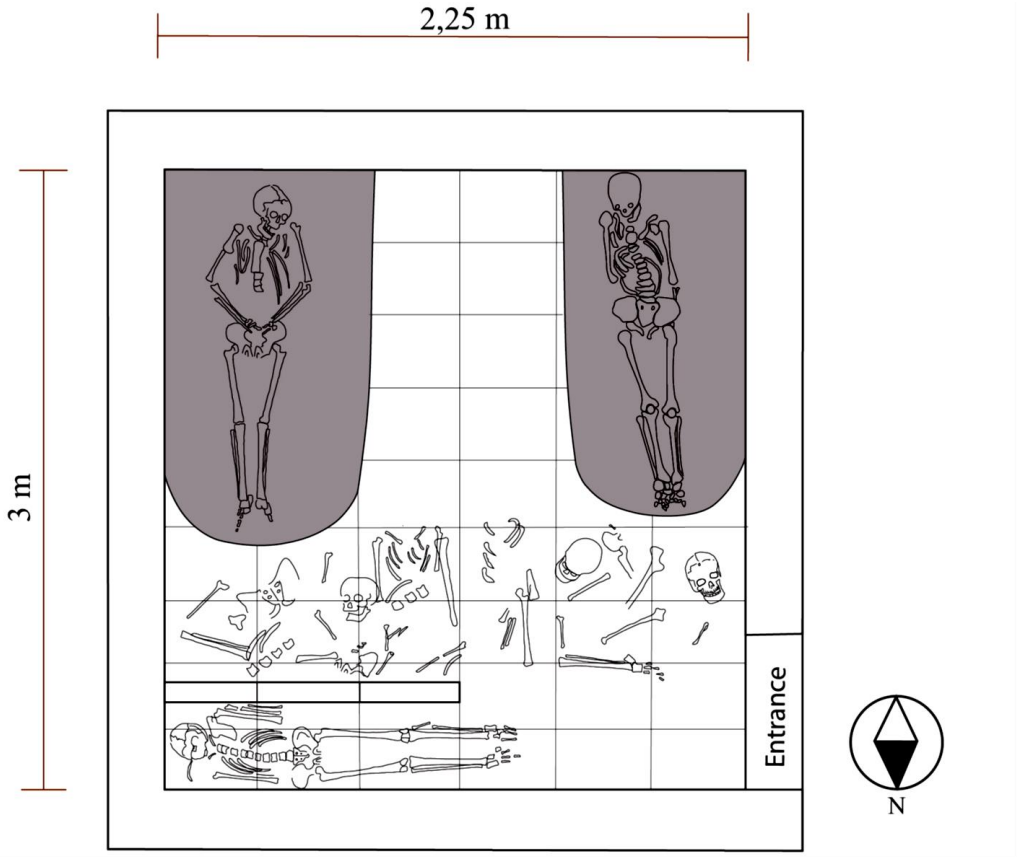


Fig. 25: The vaulted tomb with the reconstructed position of the human remains. Drawn by Fruzsina Németh

A similar example of the same type of vaulted tomb was found at Tell Kilik Mishik, (Fig.26) Erbil (about 5 km in the south from Sheikhi Choli tomb) in 2011, with a size of 2.60 x 2.20 x 2.10 m (Fig.27). The Kilik Mishik tomb could be entered form the north by a double arched door with 80 cm width (Fig.28), and in the wall were two niches located in the southern part of the building. The entrance was closed off by bricks and jars of different sizes (Fig.29). Also bricks were used to cover the ground. More than one body was buried in this tomb, although no coffins were found. Human and sheep bones were mixed on the ground of the remains, which made the identifications rather hard.[124]

[124] OTHMAN 2017, 210

Fig. 26. The Middle Assyrian vaulted tomb at Kilik Mishik (after IBRAHIM 2011, Fig. 12.a)

Fig. 27. The Middle Assyrian vaulted tomb at Kilik Mishik with its gate (after IBRAHIM 2011, Fig. 12. b)

Fig.28. The Middle Assyrian vaulted tomb at Kilik Mishik with its gate and the jars, (after IBRAHIM 2011, Fig.13)

Fig.29. The inside of the Middle Assyrian vaulted tomb at Kilik Mishik (after IBRAHIM 2011, Fig.16)

The finds discovered in the tomb included: some bronze bracelets, bronze rings, necklaces, eight earrings, and needles, a huge number of red and white opal, coral beads, and natural crystals which probably belonged to the jewellery of the deceased. The pottery was also presented by a small jar with painted red bands, and a medium sized jar under the brick floor which contained human remains.[125] (Fig.29)

In both of the tombs, the arch of the vault starts on the ground, and only a few niches are presented, which layout is typical to the Erbil and Mosul region. A tomb like this can be found also in Assur (Tomb 45), but in comparison the Sheikhi Choli has a semi trench layout, and was built form thicker, trench shaped bricks. It is clearly visible that in all three cases we can speak about the same form if Middle Assyrian

[125] The similarity have been found in the Middle Assyrian vaulted tomb at Kilik Mishik-Erbil, Iraq, IBRAHIM 2011, 5-6.

vaulted tombs.[126]

Middle Assyrian layers in Sheikhi Choli vaulted tomb												
Trench	Level	Function of the loci	Basin	Plate	Bowl	Goblet	Pot	Jar	Pot-stand	Strainer	Body sherd	Total
Sh.Ch.V.T	1	Grave		3	63	1		69			7	143
Total				3	63	1		69			7	143

Table 5: Middle Assyrian layers in Sheikhi Choli vaulted tomb

Although the house, to which the tomb belonged, was not found, there were some locational and architectural features, like a strong ceiling and horizontal bricks, which suggests that a room or house may have been built upon it. During the Assyrian period, despite the former custom, tombs were mainly built under the floors of houses. The question of the theoretical significance and practical benefit arises. It seems that the upper house and the tomb were connected via stairs, or a narrow corridor with steps. The tombs usually have small entrances (60-80 cm), which were completely closed down with stones or bricks.[127] (Fig.32) Unfortunately at the Sheikhi Choli tomb no stones or bricks have been observed, and there is also no trace of connection with an upper building, which structure cannot be excavated because of the commercial building laying on it.[128]

4.3.2. The ceramics

The tomb provided about 143[129] diagnostic sherds but only 116 have been studied for this research. In the material different functional groups could be distinguished, such as serving or short-term vessels. Eating and drinking vessels belong to the serving category. Medium sized jars, which served for storage for dry and liquid materials were used only for a couple of days. In addition, such characteristics as glaze indicate that the tomb was used by a richer family belonging to a higher level of society. The grave did not provide cooking or storage jars, probably because for the deceased the meals were offered not prepared in the tomb, and only

[126] PEDDE 2015, 48. Plate 52, A-D
[127] HAUSER 2012, 329-330. (FIG. 8B, 9A)
[128] OTHMAN 2017. 213
[129] The study was carried out on the 119 complete vessels for the rest, unidentified sherds perhaps belonged to the upper layers of the tomb.

the forms used to contain offerings could be found. The animal bones preserved on the bottom of small jars and bones also confirms this hypothesis. (Table 5)

No	Sherds	Trench	Levels	Shapes	Datation
1.	1741	1	1	plate	MA
2.	1683	1	1	jar	MA
3.	1634	1	1	jar	MA
4.	104	1	1	bowl	MA
5.	1676	1	1	jar	MA
6.	1675	1	1	jar	MA
7.	1684	1	1	bowl	MA
8.	1685	1	1	bowl	MA
9.	1695	1	1	jar	MA
10.	1700	1	1	bowl	MA
11.	1664	1	1	bowl	MA
12.	1657	1	1	bowl	MA
13.	1698	1	1	bowl	MA
14.	1731	1	1	bowl	MA
15.	1725	1	1	bowl	MA
16.	1729	1	1	bowl	MA
17.	1732	1	1	bowl	MA
18.	1728	1	1	jar	MA
19.	1716	1	1	jar	MA
20.	1679	1	1	jar	MA
21.	1704	1	1	jar	MA
22.	1713	1	1	jar	MA
23.	1722	1	1	bowl	MA
24.	26	1	1	bowl	MA
25.	28	1	1	bowl	MA
26.	29	1	1	bowl	MA
27.	31	1	1	bowl	MA
28.	32	1	1	bowl	MA
29.	34	1	1	bowl	MA
30.	35	1		bowl	MA
31.	36	1	1	bowl	MA
32.	1702	1	1	jar	MA
33.	84	1	1	bowl	MA
34.	97	1	1	bowl	MA
35.	1707	1	1	jar	MA
36.	1706	1	1	jar	MA
37.	146	1	1	jar	MA
38.	147	1	1	jar	MA
39.	1711	1	1	jar	MA
40.	1710	1	1	jar	MA
41.	152	1	1	jar	MA
42.	1672	1	1	jar	MA
43.	1753	1	1	jar	MA
44.	160	1	1	Body sherd	MA
45.	161	1	1	Body sherd	MA
46.	162	1	1	Body sherd	MA
47.	163	1		Body sherd	MA
48.	164	1	1	Body sherd	MA
49.	165	1	1	Body sherd	MA
50.	166	1	1	Body sherd	MA
51.	167	1	1	jar	MA
52.	46	1	1	jar	MA
53.	47	1	1	jar	MA
54.	48	1		jar	MA
55.	50	1	1	jar	MA
56.	53	1	1	jar	MA
57.	54	1	1	jar	MA
58.	55	1	1	jar	MA

No	Sherds	Trench	Levels	Shapes	Datation
59.	61	1	1	bowl	MA
60.	62	1	1	bowl	MA
61.	65	1	1	bowl	MA
62.	39	1	1	jar	MA
63.	41	1	1	jar	MA
64.	44	1	1	jar	MA
65.	130	1	1	jar	MA
66.	59	1	1	bowl	MA
67.	70	1	1	plate	MA
68.	71	1	1	bowl	MA
69.	72	1	1	bowl	MA
70.	78	1	1	jar	MA
71.	85	1		bowl	MA
72.	86	1	1	bowl	MA
73.	87	1	1	bowl	MA
74.	88	1	1	bowl	MA
75.	89	1	1	bowl	MA
76.	91	1	1	bowl	MA
77.	92	1	1	bowl	MA
78.	93	1	1	bowl	MA
79.	94	1		bowl	MA
80.	95	1	1	bowl	MA
81.	100	1	1	bowl	MA
82.	101	1	1	bowl	MA
83.	102	1	1	bowl	MA
84.	105	1	1	bowl	MA
85.	106	1	1	bowl	MA
86.	107	1	1	jar	MA
87.	108	1	1	bowl	MA
88.	110	1	1	jar	MA
89.	111	1	1	bowl	MA
90.	112	1	1	bowl	MA
91.	113	1	1	jar	MA
92.	114	1	1	jar	MA
93.	115	1	1	jar	MA
94.	116	1	1	jar	MA
95.	117	1	1	jar	MA
96.	118	1	1	bowl	MA
97.	119	1	1	jar	MA
98.	120	1	1	jar	MA
99.	122	1	1	jar	MA
100.	123	1	1	jar	MA
101.	142	1	1	jar	MA
102.	151	1	1	jar	MA
103.	156	1	1	jar	MA
104.	1661	1	1	bowl	MA
105.	1690	1	1	bowl	MA
106.	1678	1	1	jar	MA
107.	1677	1	1	jar	MA
108.	1733	1	1	jar	MA
109.	83	1	1	bowl	MA
110.	1659	1	1	bowl	MA
111.	1667	1	1	plate	MA
112.	1658	1	1	bowl	MA
113.	1681	1	1	goblet	MA
114.	1673	1	1	bowl	MA
115.	1656	1		bowl	MA
116.	1655	1	1	bowl	MA

Table 6: The Middle Assyrian ceramics from Sheikhi Chili tomb.

5. Methodology

For the examination of the sherds a new database and recording method was used which was developed by the author of this dissertation. The pottery from Tell Kilik Mishik was previously studied during the excavation project but for the excavators used the classic method of pottery study they had to be recoded again for the comparative analysis with the Sheikhi Choli tomb, which was not dealt with before. The method created and developed for this work was based on the system of the Peshdar plain[130] and Tell Sabi-Abyad project[131].

5.1. Sampling

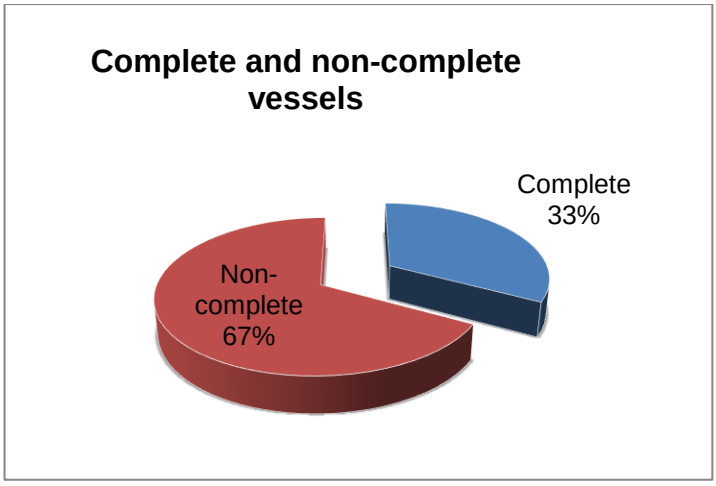
The pottery sherds with an identifiable archaeological context from the seasons 2010-2013 were collected. The field works begun in 2010 by the team of the Salahaddin University, while during the next year they were joined by the team consisted of EPHE alongside Lumière University Lyon 2 from France. The first team was under the management of Dr. Yousuf Alfahdawy and the second team was led by Professor Dr. Olivier Rouault and his assistant Professor Maria Grazia.[132]

Moreover, in the year, there was a survey by a Polish team under the direction of Rafael Kołinski. For the remaining years, 2011-2013, the excavations were done by Sir Dr. Noaman Jumha Ibrahim. Unfortunately, after four seasons, in 2013, the excavation stopped because of the economic crises within the Kurdistan Regional Government.

The chosen sherds came from primary, in situ context from both sites. The number of diagnostic sherds, along with complete vessels is about 396. All the sherds were drawn and included in the database.

Fortunately, an estimated 33% of the sherds are from complete vessels which gave key information about the forms and physical features of the body. (Graph.7)

[130] HERR 2016, 80-100, HERR 2017, 104-127, HERR 2018, 120-133.
[131] DUISTERMAAT 2007
[132] ROUAULT - MASSATTI 2010,1.



Graph.7. Complete and non-complete vessels

5.2. Collecting data

During the processing of the sherds firstly they were cleaned right on the field and the diagnostics – rims, bases, handles, and body sherds with decoration and other characteristic features – were sorted for the scientific examination. Secondly, all these were counted and registered in the database. Furthermore, the context from the ceramics were added and they were photographed from the in- and outside, and with the registration number as well. The photos were taken in a studio environment for better light settings and technical equipment.

5.3. Measurement

All the different parts of the shames were measured. The rims and the bases were registered with the help of a diameter chart, which made the reconstruction of the sizes possible. For the body sherds' and complete vessels, a calliper was used to define the thickness of the walls; and a rod for the complete height. Finally, the diameter of the interior and exterior of the vessels was defined as well according to the diameter chart.

5.4. Scientific examinations

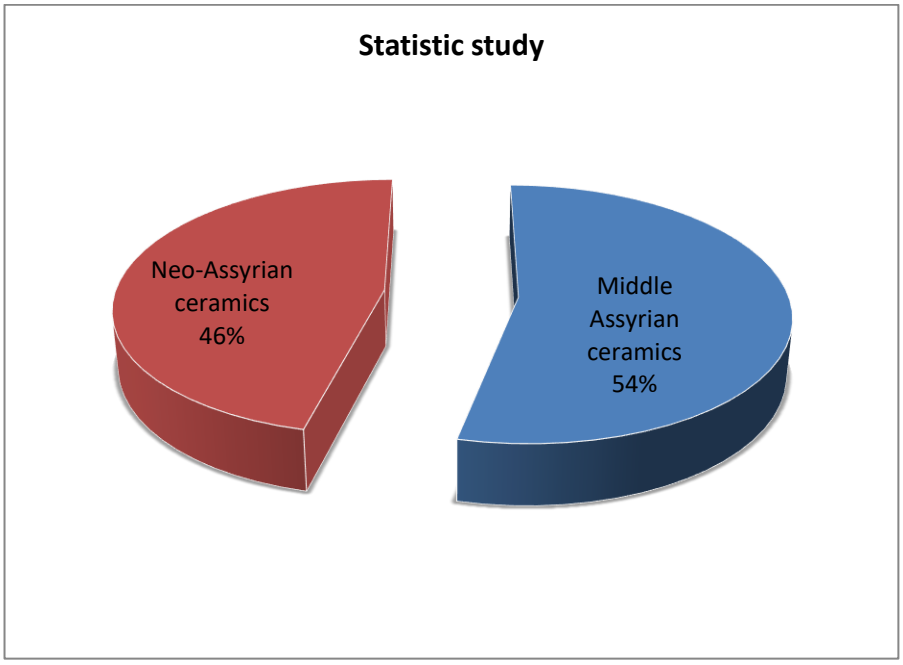
All diagnostics were registered and all of the information with corresponding attributes was entered and computerized. Luckily, the research provided enough samples of complete and non-complete vessels from both the Middle and Neo-Assyrian periods.

The descriptions of the individual sherds incorporated the following information: inclusion, texture, manufacture, shape, surface treatment, color, firing, decoration, special features and measurements, furthermore they were registered on a serial form.

The information collected were used for creating the typology, based on the characteristic of sherds and also other attributes, such as decoration, surface treatment, used clay, size, geometric shape, etc. (Table.6)

5.5. Statistic

The statistic study of the ceramics showed that the material contains 54% Middle Assyrian and 46% Neo-Assyrian pottery. (Graph. 8 and Table 7)



Graph 8: Statistic study

For the digitalization of the drawings Adobe Illustrator CC5 was used. The database used was created in Access 2010. The USB Digital Microscope Endoscope 1000X2MP 8 Led device served to determine the fabric groups and show the used technic of formation and surface treatment. Finally, the charts were created in Microsoft Office Excel.

shapes	Middle Assyrian	Neo Assyrian	Total
Bowl	74	48	122
Plate	3	1	4
Strainer	2	1	3
Pot	1	19	20
Goblets	10	12	22
Jar	99	74	173
Basin		2	2
Pot stands	3	8	11
Body sherds	19	20	39
Total	211	185	396

Table 7: statistic study

1	**Shred's N°**				Season of excavation						
2	**Shred's lot N°**										
3	**Type of container**	Jar	Bowl	Cup	Bottle	Pitcher	Goblet	Cooking-pot	strainer	Cover	Handle etc
4	**Pottery's category**	G: Coarse			C: Common			F: Fine			
5	**Shred's portion**	R: Rim			N: Neck			D: Body		B: Base	
6	**Shred's making**	M: hand made			W: Wheel			C:Coil			
7	**Shred's firing**	SU: overcooked			M: Medium			SO: Undercooked			
8	**Shred's fabric**	8.1 F: Fine			M: Medium			L: Coarse			
		8.2 Core coulor			In :			Out :			
		8.3 temper :			M: Mineral(big-medium little)			V: Vegetal (big-medium-little)			
9	**Shred's surface**	9.1 L Burnished 9.2 Surface colour 9.3 surface's decoration			Non L: Non Burnished E: Slipped, PO: Polished, B: Bitumen, G: glazed S: Smoothed S: No decoration I: incised PE: combed PO: punctured D: Finger Printed M: hand modelled A: applied P: Painted IM: printed						
10	**Diameter**	Exterior			Percentage :						

11	**Base type**	pointed	Rounded	Flattened	Flat	Concave	Disk silent	Disk concave	Ring annular	Foot-base a pied
	Pedestal	Ring-folded	Ring-protruding	Ring added	button	stump				
	Base-thickness									
12	**Body type**	Cylindrical	Flaring	Conical	Concave	Globular	Ovoid	Carved	convex	
	body-thickness									
13	**Neck type**	Cylindrical	Flaring	Conical	convex	Concave	Concave haring	Concave conical	Convex conical	
	Neck thickness									
14	**Rim type**	thinned	trenchd	rounded	thickened					
		Bevelled	outside inside	Round-folded	Outside inside	Horizontal-folded		Inside outside		
		Thin-folded	outside inside	Trench-flat-folded	outside inside	Angular-folded		outside inside		
		molded	outside inside	gutter	outside inside	Hammer-head-molded				
		Eversed-protruding	outside inside	Intended-groove	ribbon					
	Rim thickness									
15	**Date of registration**									
16	**initials**									
17	**Comments**	Position of the decoration		Marks of burning Oxidizing: O Semi-oxidizing: SO Reducing: R Semi reducing: SR						
18	**High:**									

Table.6, Analysis of the sherds

6. Typology and main forms

6.1. Introduction

This chapter demonstrates all the typological aspects with their typical morphological features. Both periods were studied and explained separately in the following.

6.2. The Middle Assyrian forms

The Middle Assyrian pottery tradition appeared alongside the ceramics of the Mitannian kingdom in the mid-second millennium. Recent excavations in northern Iraq have provided new light on the study of Middle Assyrian ceramics. As is the case with the Mitannian ceramics, the Middle Assyrian ceramics were distributed within the political boundaries which were under the domination of the Mitannian kingdom.[133] This territory was expanded to the south and west of the Middle Assyrian Empire after the fall of Mitanni Kingdom. On the other hand, the Mitannian forms were used simultaneously with the Middle Assyrian ceramics until the culture permanently disappeared.[134]

A brief discussion about the previous study of Middle Assyrian ceramics was presented in chapter 1. It can be said the Middle Assyrian ceramics are known as the finest, thinnest and most well-produced ceramics in Mesopotamia and were influenced by the older Khabur and Nuzi wares.

6.2.1. Introduction

The first part of this chapter explains all the Middle Assyrian typological aspects. All parts of the vessels have classified based on their different types of morphology.

6.2.2. The samples and research methods

All ceramics of the Middle Assyrian period are described by their characteristics and include all of the information regarding the clay, inclusions, etc.

[133] LYON 2000, 89-126.
[134] D'AGOSTINO 2008. 525-547.

The dating is based on comparisons with other published materials from other sites such as Tell Sabi Abyad, Tell Sheikh Hamad, Tell al-Rimah, the graves of Assur and other settlements in Iraqi Kurdistan. Excavation reports have also proven to be useful in the comparative studies.

All parts of the vessels have been studied and classified into various types based on their morphology. The shapes of the vessels are also determined. The classification of the ceramics has been done based on the morphological attributes. Many scholars have used different methods to classify the main types of artifacts and ceramics. For this study, the term *type* is used for identifying a certain group of characteristics. Scholars such as Rouse[135], Krieger[136], Spaulding[137], Rice[138] and others have previously studied the classification of the ceramics.

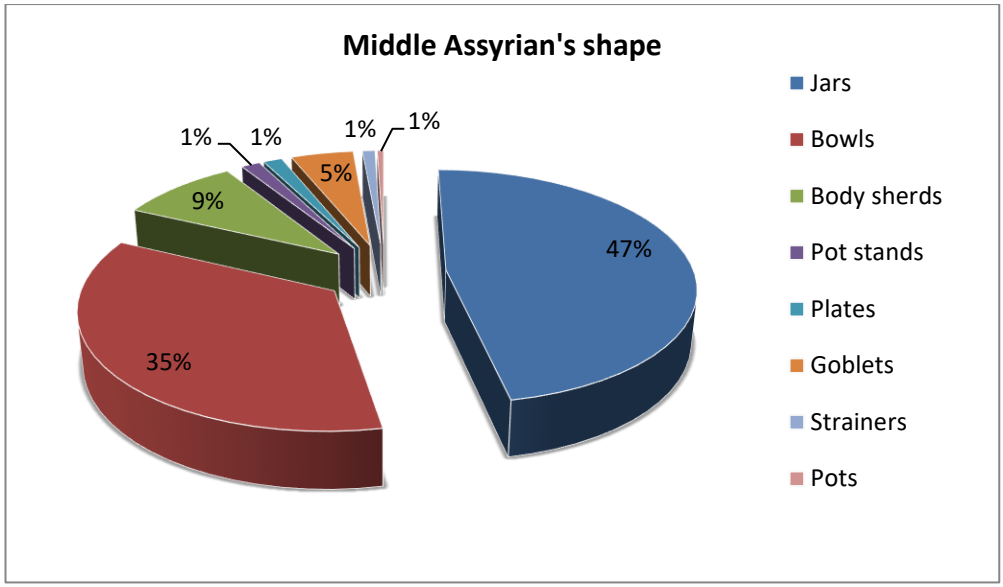
6.2.3. Shapes

For the Middle Assyrian shapes typology, eight types could be defined. The most popular shape was the jar with a variety of different types: small and big, with or without a neck. All of these variations could be observed during this study. The jars represent about half of all the shapes and make up about 47% within 99 diagnostic sherds. The next shape to consider is the bowl. They represent the second largest group after the jars, with around 35%. The third most popular type is the body sherds, which are representing about 10% of the total, other shapes, such as the plates, goblets, strainer and pots which are represented by about 1% each.[139]

Unfortunately, those shapes which only make up to 1% do limit the information about the pot itself, but still is enough to insert new groups in the typology. On the other hand, most of the pottery are complete vessels and remained in good, well-preserved condition.

During the study, all shapes were defined by their features which are based on the rims, necks of the jars and the pots, bodies and the bases. (Graph.9)

[135] ROUSE 1944. 1960.
[136] KRIEGER 1944.
[137] SPAULDING 1953.
[138] RICE 1987.
[139] DUISTERMAAT 2007, 38.

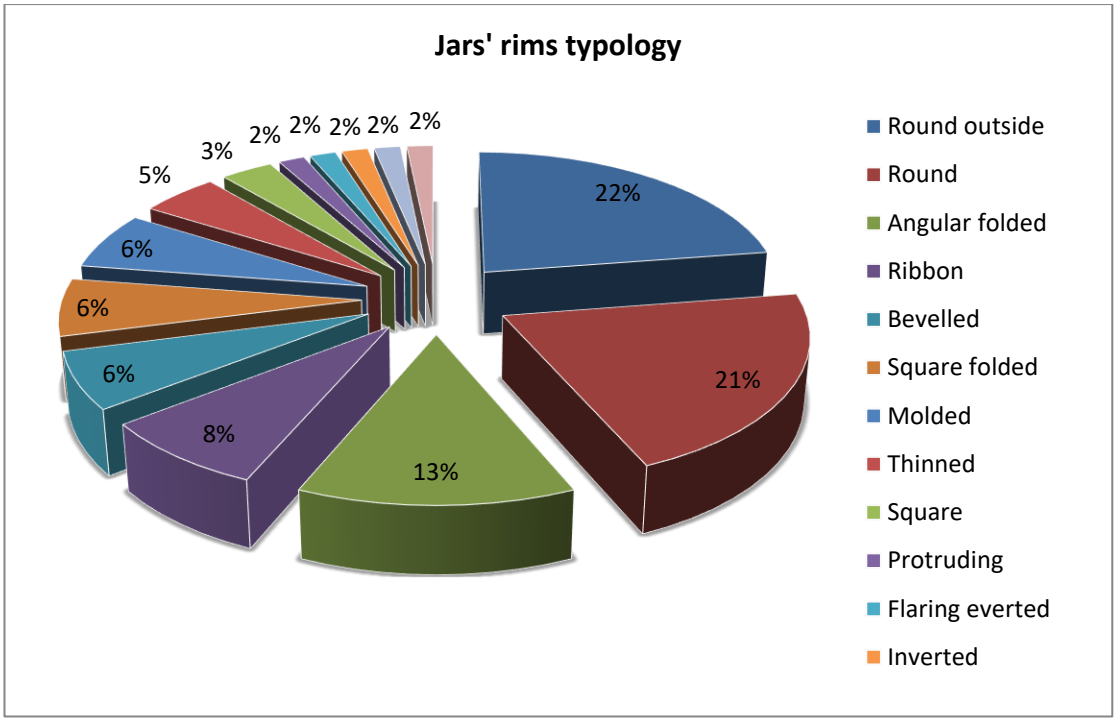


Graph.9, Middle Assyrian's shape

Jars

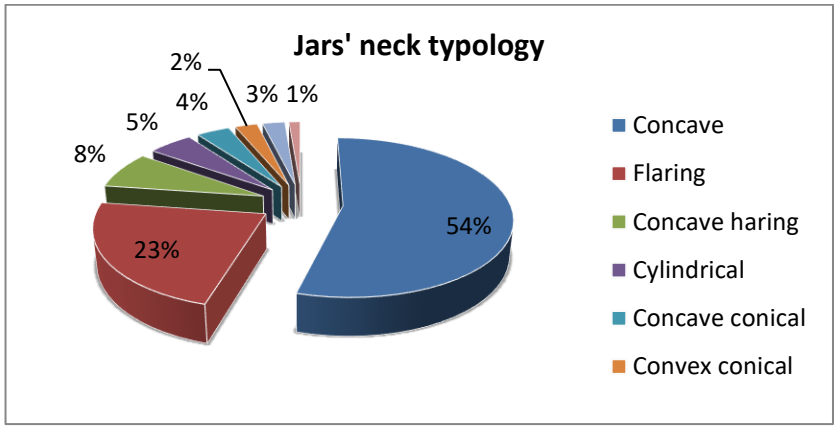
The jars are the most common shapes in both sites with about 47% of all the shapes. The most popular one of jar types is 1010 (plate 13-29) with round outside rims which are compressing about 22% of the jars. The next one is type 1008 with round rims which makes up 21% of the total. After that comes type 1001 with angular folded rims, that was 13% of all diagnostics. Type 1007 with ribbon rims covers about 8% of the sherds. The bevelled rims are also represented in the material with notable examples of type 1000. The following types are: type 1013 with trench folded rims at about 6%, type 1005 with molded rims which also makes up about 6%, type 1015 with thinned, sometimes outward rims equate to about 5%. The trenched rim of type 1012 is also common but they haven't been found at Kilik Mishik therefor they represent only 3%, in the material, type 1006 with protruding rims, type 1002 with flaring everted, type 1004 with inverted, type 1009 with round folded and the last one, type 1014 with thickened outside rims present about 2%.

The typology was created on the basis of the rims from the two sites, Tel Kilik Mishik and Sheikhi Choli tomb. The types were numbered from 1000. (Plate 13-29) (Graph.10)



Graph.10, Jars' rims typology

Considering the jars' necks several types are presented. The jars with a concave form belong to type 3000 which make up 54% of the jar sherds, proving to be the most common form. A less popular style is type 3007 with convex necks, which represent 1% of the material. Fortunately, in contrast with the Neo-Assyrian jars, most of the vessels are complete retaining all of their features with well-preserved conditions. It should also be noted that there are also several jars without necks but they do not form a considerable number.[140] (Graph.11)

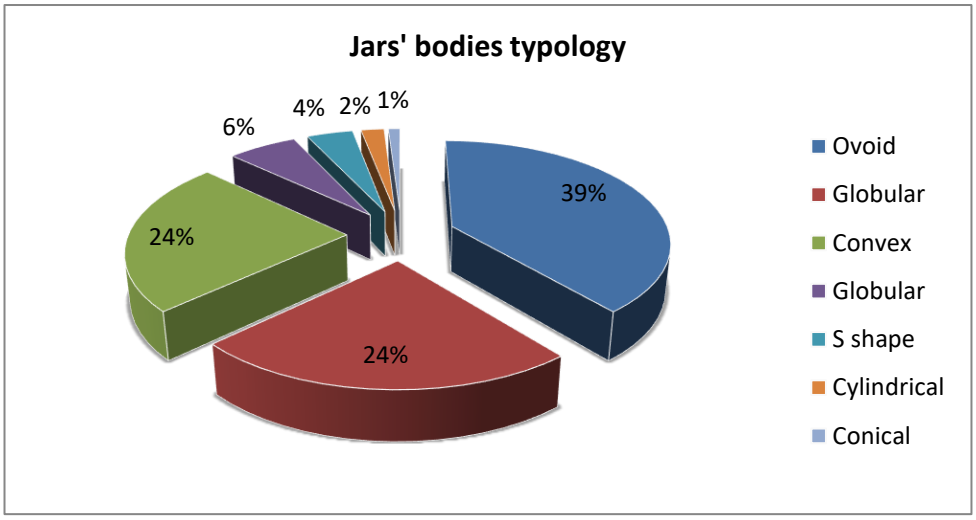


Graph.11, Jars' neck typology

[140] OTHMAN 2018, 306.

The third study on the jars is the typology based on the bodies. During this study, it was possible to conclude that the most found form is type 4000, with its ovoid walls, which form 39% of all the jars. The last type, type 4006, is the least common with conical walls at only 1% .

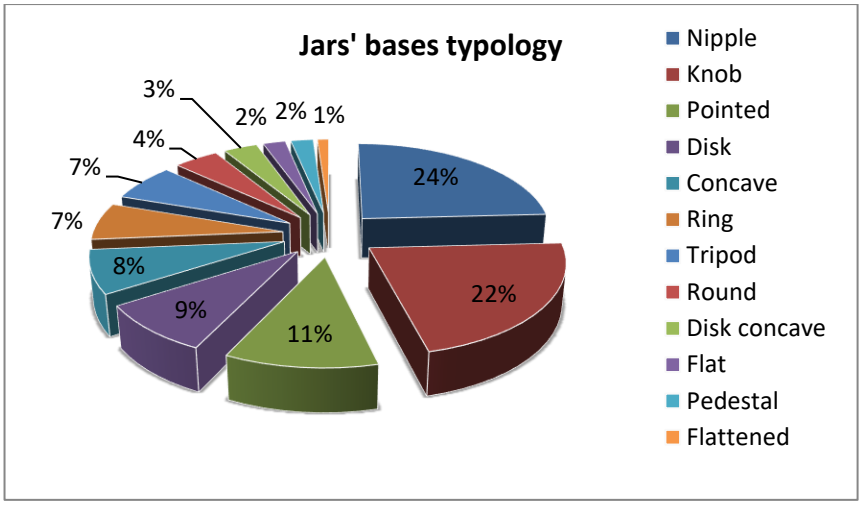
The other types, such as globular, convex and extra will be presented in the next chapter. In general, these are the most used form at both sites which have been used by the Middle Assyrian inhabitants. Finally, it should be noted that some of the bodies are decorated with different types of incisions as well as painted and grooved examples.[141] (Graph.12)



Graph.12, Jars' bodies typology

The last study on this group examines the typology of the jar bases. The most common type is 5000 with a nipple base which is represented by about 24% from all the jars' bases. The nipple, knob and the pointed types are significantly present in our study and they appear to been commonly used during the Middle Assyrian period. The most famous base is the tripod base which is a unique form for the region, as well as for the period because it appeared for the first time at the Sheikhi Choli vaulted tomb. The last type is 5011 with a flattened base. The low frequency of this style shows that it is a non-popular type.[142] (Graph.13)

[141] OTHMAN 2018, 306.
[142] OTHMAN 2018, 307.

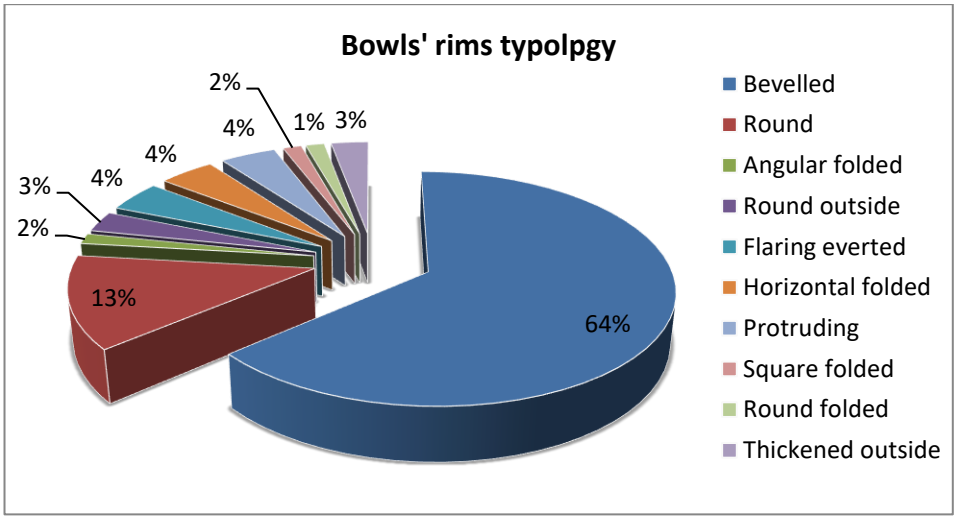


Graph.13, Jars' bases typology

Bowls

The bowls are the second biggest group for they include 35% of all the shapes studied. Much like the other shapes, the study examines all characteristics of their form.

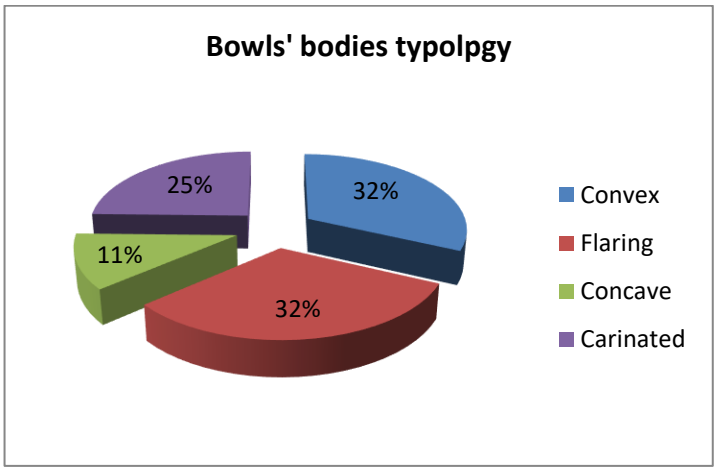
The first thing to be considered is the typology of the rims, which were the key elements to determine the main typological forms. The most common type is 1000 with a bevelled rim which forms a majority of 64%. The least common type is 1013 with a round folded rim which presents only 1% of the total study. (Plate 1-9) (Graph.14)



Graph.14, Bowls' rims typology

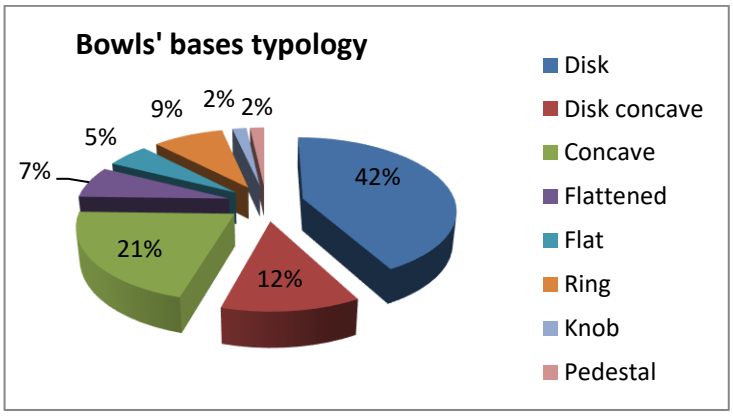
Considering the body, different types have been recognized by the convex and carinated bodies. The first type is the type 6000 with convex wall and the type 6001

with flaring wall which present about 64 % of all the bodies' forms. These are the most popular types. The second frequently used group is type 6003 with carinated wall. The last, least common type is 6002.[143] (Grapg.15)



Graph.15, Bowls' bodies typology

If we look at the typology of the bowl bases, different styles are defined as: the disk, disk concave, concave and etc. The most common type is 2001, the disk base, which represents about 42% of all the bowls. The second most widely-used type is 2000 with its disc concave base which makes up about 21%. The least common types are 2005, the knob base, and 2010 a pedestal base, with 4% of the bowl material. (Graph.16)



Graph.16, Bowls' bases typology

[143] OTHMAN 2018, 308.

Body sherds

The third group of Middle Assyrian pottery is the body's diagnostic sherds which make up about 9% of the total number of shapes. They present various decoration techniques such as the painted, incised, grooved, moulded and etc. These sherds provide further information about the typology of the decoration presented in the vessels, as well as the different styles. (Plate. 31)

Pot stands

Unfortunately, only few samples were found from the pot stands, which only represent 1% of the Middle Assyrian ceramics with only three sherds. Their rims are of various types: the first example is type 1001 with its angular folded rim, the second is type 1000 with a beveled rim and the last one is type 1010 with a rounded outside rim. The bodies are concave with flaring walls. The main base types are: type 1008 with round bases. The last group of bases is type 1013 with a trench folded rim. (Plate. 30)

Goblets

The group of goblets form 5% of the sherds. They are classified into three groups based on their shapes; the U-shaped examples prove to be the most common, with concave and flaring walls. The rims also create different types such as: the trench (type 1009), round (type 1005), protruding (1type 1004) horizontal folded (type 1003), and round outside (type 1007). The types of their bases are also recognized based on thy typology of the bases. (Plate.12)

Strainers

The strainer is another important shape that gives us new ideas about the function and its daily use by the inhabitants of Kilik Mishik and the Sheikhi Choli vaulted tomb and make up about 1% of all shapes. We have only two samples: the first belongs to type 1008 with a round rim and a carinated body, and the second is type 1010 with a rounded inside rim on a convex body.

According to their bases, they are both classified as type 2011 with a round base. In general, the body of the strainers is punctured with many small circular holes

to allow the filtration of washed food, vegetables or fruits, which were used during the Middle Assyrian period. (Plate. 10)

Pots

Pots are large vessel which were used for cooking. We have only one sample from this period and therefore only contribute 1% of the overall study. It is of type 1010 with a round outside rim, a concave neck and an ovoid body. The base is type 2011 with a round base. (Plate. 11)

6.2.4. Rims' typology

The Middle-Assyrian rims' typology has been studied extensively and as a result, fourteen types were recognized. This study is coming from the diagnostic rims sherds from both of the sites Tell Kilik Mishik and Sheikhi Choli vaulted tomb. All of the main types were studied and presented. The main forms were numbered from 1000, as well as the ones from the Neo-Assyrian period, and were classified based on their shapes.

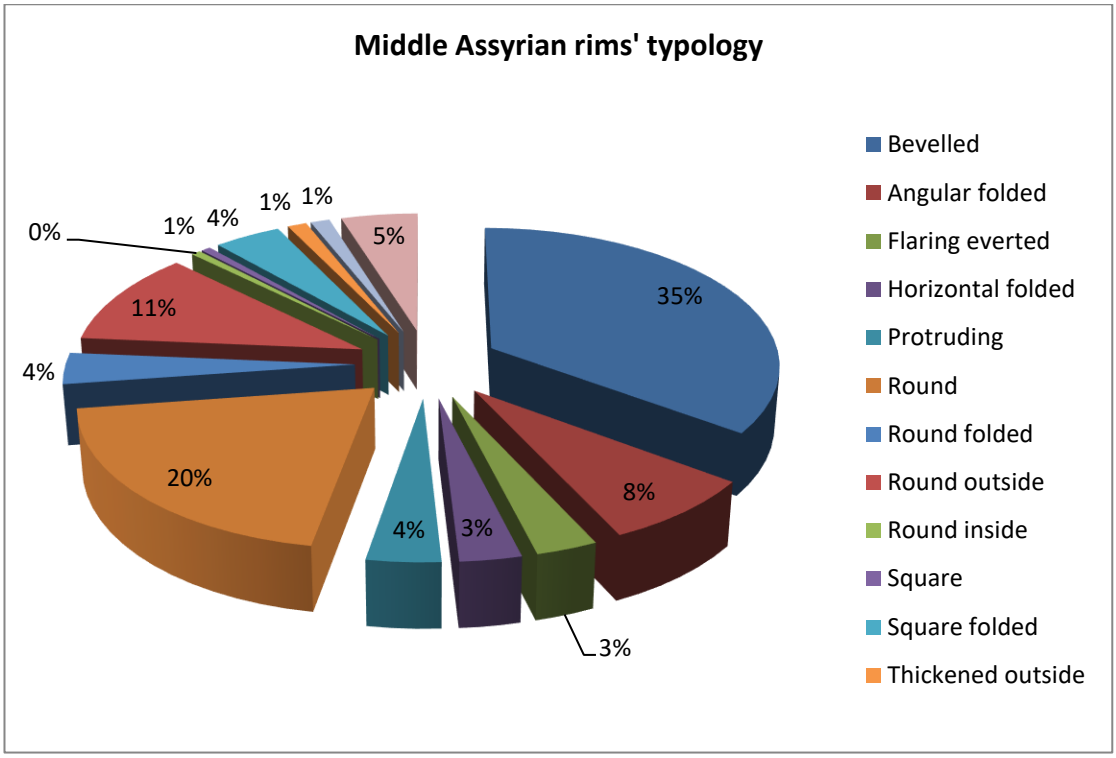
The most frequent type in the Middle Assyrian period was type 1000 with a bevelled rim which includes about 35% of all rims. However, the following types also appear to be used in big number: type 1005, a rounded rim which makes up 20% of all samples, type 1001 with a round outside rim which also makes up about 11%. Those examples which do not pass the 10% mark include: the angular folded rim is labelled as type 1001 with about 8%, type 1013 with a grooved rim with about 5%, both type 1004 with a protruding rim, and type 1010 with a trench folded rim are listed with 4% each, whilst type 1002 with its flaring everted style and type 1003's horizontal folded style make up 3%. Types 1009 with a trench rim, 1011's thickened outside rim and type 1012, with thinned rim, are the least common types which only represent 1% for each type[144]. (Table.8 and 9) and (Graph.17)

Rims' typology	Types	%
Bevelled	1000	35
Angular folded	1001	8
Flaring everted	1002	3

[144] The typology studies have been done by the researcher.

Horizontal folded	1003	3
Protruding	1004	4
Round	1005	20
Round folded	1006	4
Round to outside	1007	11
Round inside	1008	0
Trench	1009	1
Trench folded	1010	4
Thickened outside	1011	1
Thinned	1012	1
Grooved rim	1013	5

Table.8, Rims' Typology



Graph.17, Middle Assyrian rims' typology

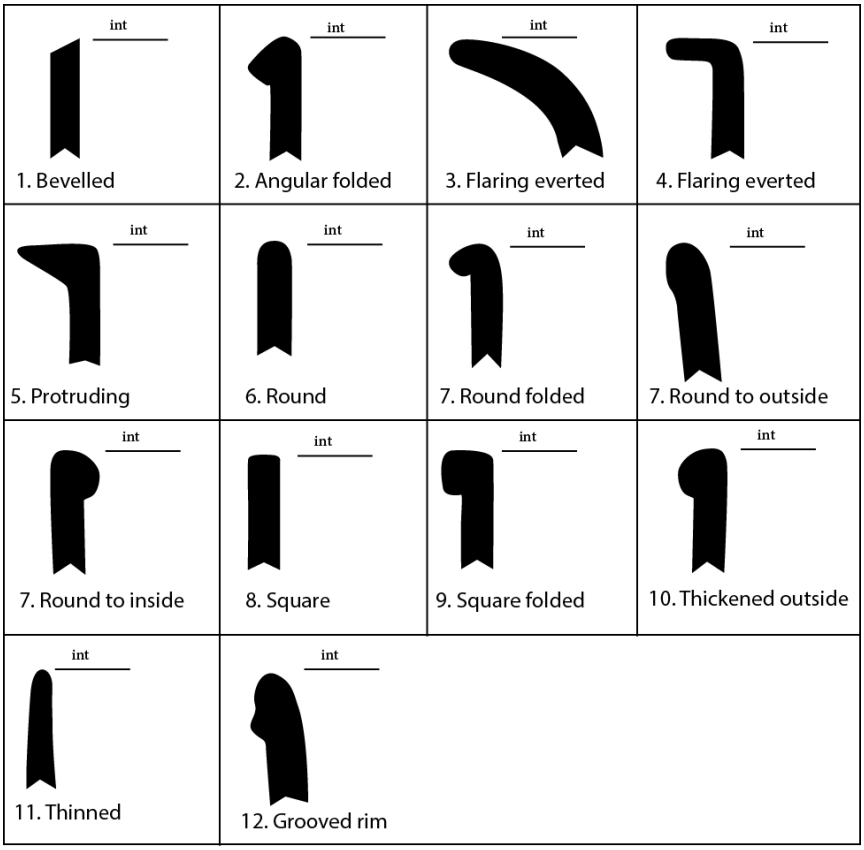


Table.9, Diagrams of rim types for the Middle Assyrian ceramics.

6.2.5. Bases typology

Beside the rims the bases and their typology were also studied. Remarkably, the base is the most important diagnostic sherd which has proved useful in drawing conclusions about the Middle Assyrian ceramics. From both sites, Tell Kilik Mishik and Sheikhi Choli, many diagnostic bases have been studied and different types have been identified. Fourteen different types were recognized from those sherds collected, and we labelled them from number 2000 to 2013.

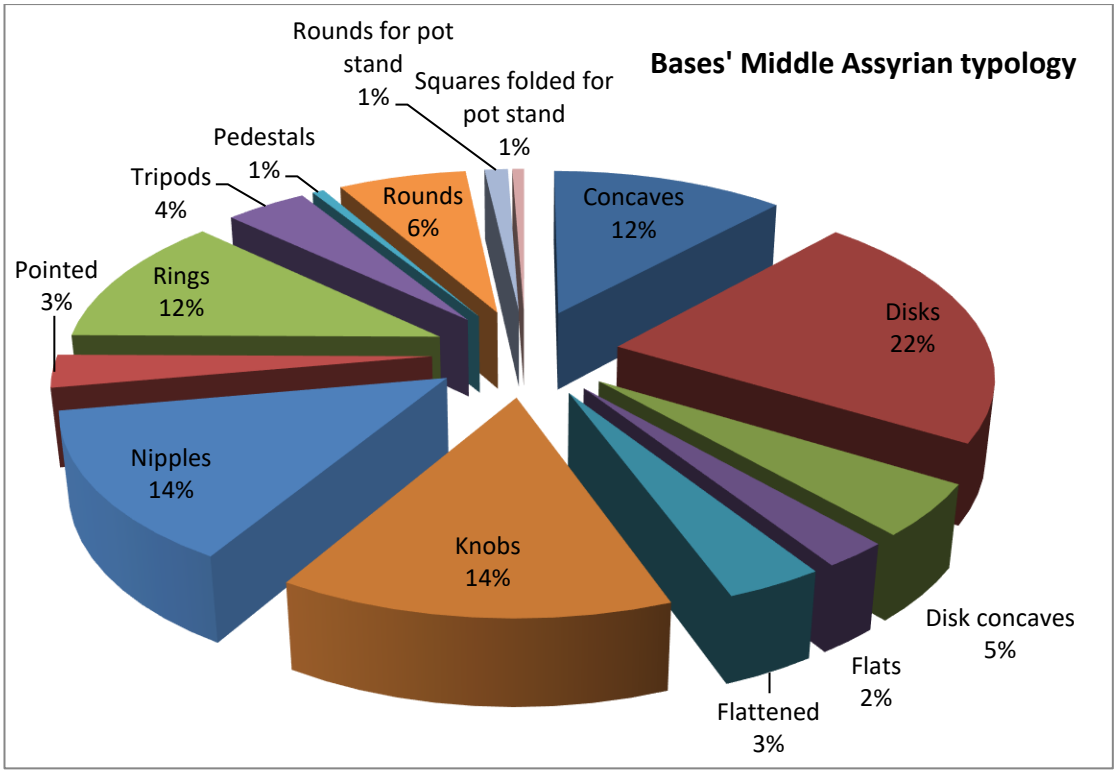
The most popular base type is 2001, the disk base featuring about 22% of all the sherds. The second most widely-used ones, which both have a presence of 14%, are types 2005, knob bases, and 2006, the nipple bases. Type 2000 with its concave base, and type 2008, a ring base style is making up about 12% each. The next most frequent style is about 6% of all examples, which is type 2011, a round base. Type 2002 with disk concave base presents also 5%, the types 2004 with flattened base and the type 2007 with pointed base appear to be about 3%. Type 2009, a tripod base appears with 4% of all the bases, which are the most specific bases in the northern

Mesopotamia. It is one of the most frequently appeared characteristic of the Middle Assyrian ceramics of this region, mainly Erbil. For the remaining types; type 2003 with flat base presents about 2% of all the bases. The least used types are type 2010 with pedestal base, type 2012 with round pot stand bases and type 2013 with trench folded base for pot stands which are presented with 1% each.[145] (Plate 32-33) (Table.10) and (Graph.18)

Bases' typology	Types	%
Concaves	2000	12
Disks	2001	22
Disk concaves	2002	5
Flats	2003	2
Flattened	2004	3
Knobs	2005	14
Nipples	2006	14
Pointed	2007	3
Rings	2008	12
Tripods	2009	4
Pedestals	2010	1
Rounds	2011	6
Rounds for pot stand	2012	1
Trenches folded for pot stand	2013	1

Table.10, Bases' Typology

[145] The typology studies have been done by the researcher.



Graph.18, Bases' Middle Assyrian typology

6.3. The Neo-Assyrian forms

6.3.1. Introduction

The Neo-Assyrian ceramics appeared directly after the Middle Assyrian ones in the beginning of the first millennium. Neo-Assyrian pottery was widespread in the area from Elam in the east, to the Mediterranean in the west and from the Middle of Anatolia in the north, to Egypt in the south .

The recent excavations in northern Iraq have provided a new light on the Neo-Assyrian ceramics. Quite clearly they have been influenced by previous ceramic styles including the Middle Assyrian, Nuzi and Khabur ware. On the other hand, besides the glazed ceramics, palace wares also appeared. The glazed ceramics initially appeared during the Mitanni and Middle Assyrian periods but during the Neo-Assyrian age, the styles and techniques were developed and rendered into many morphological shapes .

The Neo-Assyrian ceramics are known by their finest, thinnest and well fabricated ceramics with the new invention of palace ware in Mesopotamia and were influenced by the previous Khabur, Nuzi and Middle Assyrian wares.

The Neo Assyrian ceramic samples from both sites, Kilik Mishik and Sheikhi Choli vaulted tomb, provide much information about the local ceramic tradition and clearly link the styles to neighbouring areas such as Assur and Nineveh. This research therefore helps pottery specialist to acquire new information that could be used to fill the existing gaps about the chronology and the ceramic sequences and typology of the Neo-Assyrian period.[146]

In the following the individual aspects regarding the typology of the Neo-Assyrian ceramics will be explained, using the method which was used to describe the Middle Assyrian ones.

6.3.2. The samples and research methods

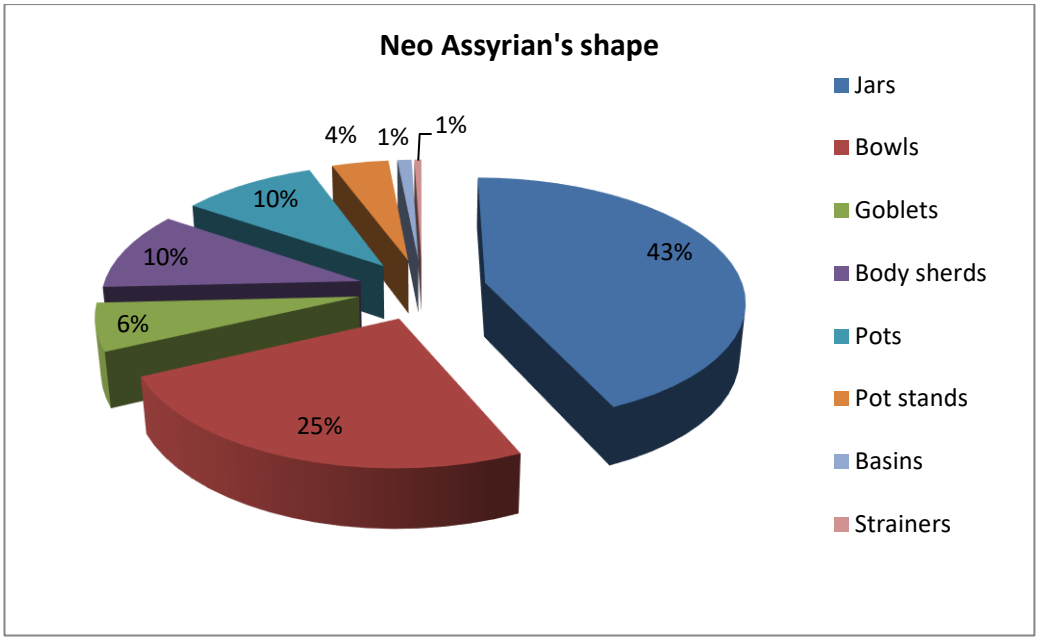
The pottery of the Neo-Assyrian age has been described by their characteristics including all the following information about the clay and inclusions and etc. as explained before. The determination of dating is based on the comparisons with published materials from other sites such as Nineveh, Dūr-Šarrukīn, Assur, Eski Mosul, Qasr Shamamok, Hamaidat, Khirbat Hatara, Khirbat Kharhasan, Tell al-Hawa, and Tell Taya. The Neo-Assyrian ceramics came from the graves of Assur. The comparison with other excavation reports was carried out as well.

All parts of the vessels have been studied and classified into special types according to their morphology. The shapes of the vessels were also determined.

6.3.3. Shapes

The analysis of the diagnostic sherds resulted in the percentages of all types and shapes. The jars make up 43%, which means they were mostly found, second is the bowl with around 25%, body sherds and pots take the third places with about 10% each, following by goblets with about 6%, as well as pot-stands with 4%. The least used form is the basin and the strainer, and represent only 1% from all the types. Strikingly, no plates and vases have been found at the sites thus far.[147] (Graph. 19)

[146] OTHMAN 2018, 301
[147] OTHMAN 2018, 303

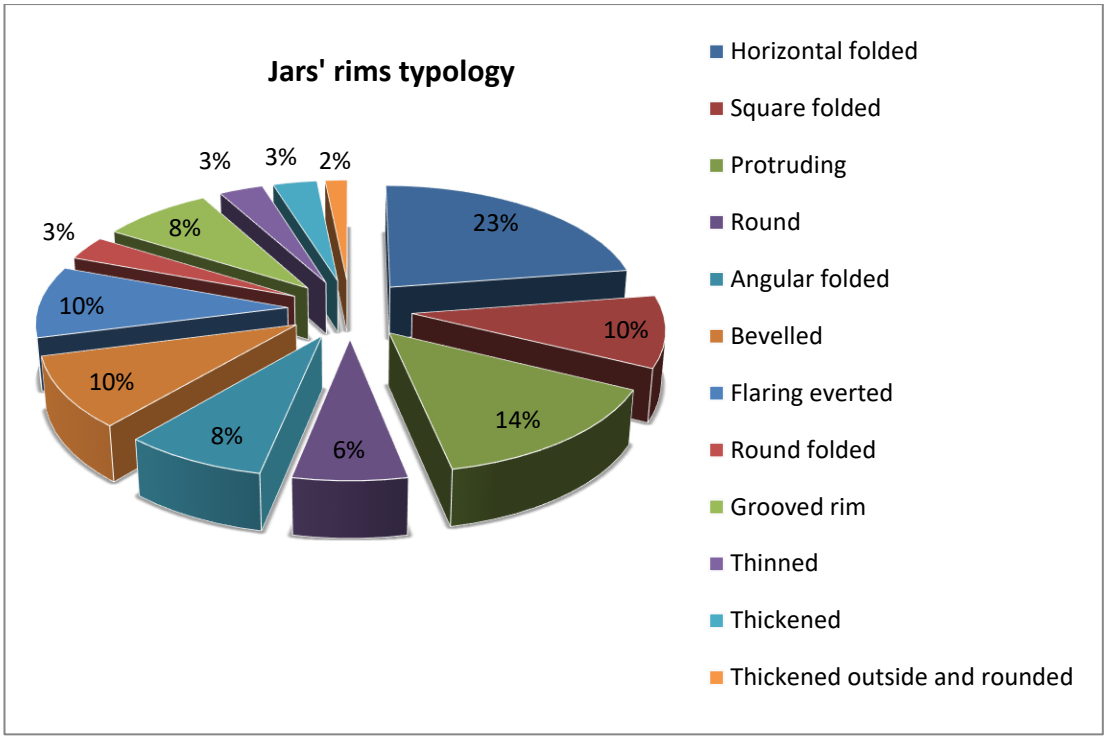


Graph. 19, Neo Assyrian's shape

Jars

The most widely-used group of the Neo-Assyrian period was the jar; with about 43% of sherds belonging to this group. The most used rim type 105 with horizontal folded rim, which makes up about 23% of the whole material. The following group was 106 with protruding rim with about 14%. The other popular types were type 108 with trench folded rim, type 101 with beveled rim and type 103 with flaring everted rim with 10% each. The last type, which was rarely used, is 112 with thickened outside and rounded rim, which represent 2% from all the jars.[148]. (Plate 46-56) (Graph.20)

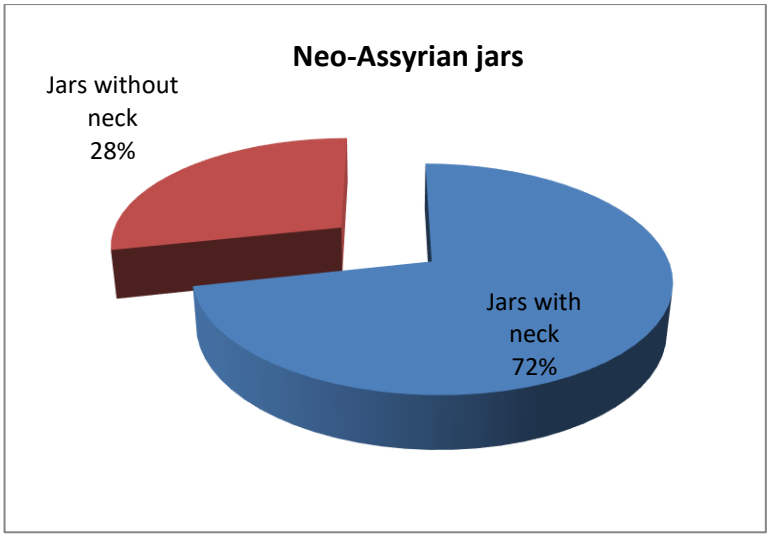
[148] DUISTERMAAT 2007, 308.



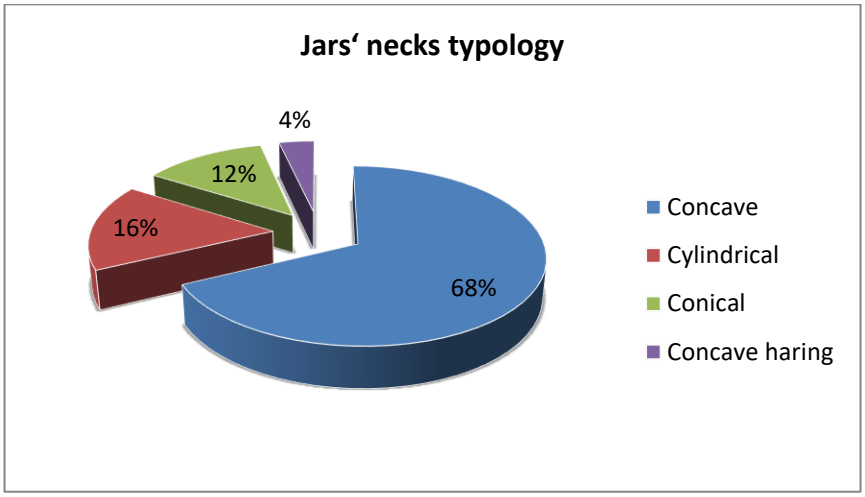
Graph.20, Jars rim typology

The jars can be classified into two groups based on their necks: jars with neck presented are about 72% and the ones without neck present 28% (Graph. 21). In the group of jars with necks several sub-groups are presented, from which the most popular were the jars with concave necks (type 300) with about 68% and the cylindrical necks of type 301 with about 16% count as second. The type 302 with conical neck represent on 12% of the pieces and the least-used, type 303 with only 4%. Unfortunately, most of the sherds from the jars are small and more than a half of them do not have necks, thus they only give limited information regarding the morphology.[149] (Graph.22)

[149] OTHMAN 2018, 306.



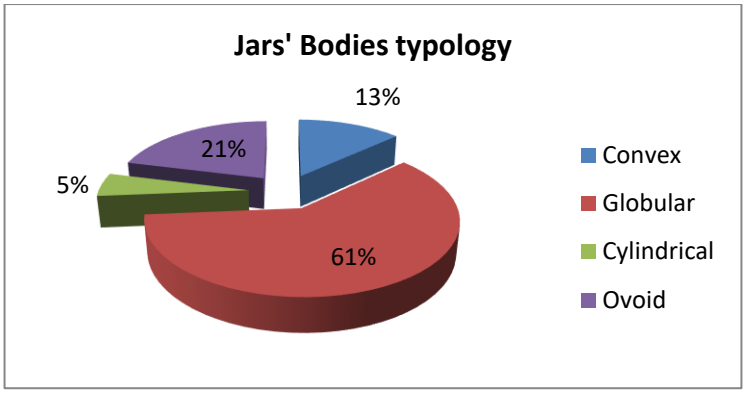
Graph.21, Jars 'necks and without neck percentage



Graph.22, Jars 'necks typology

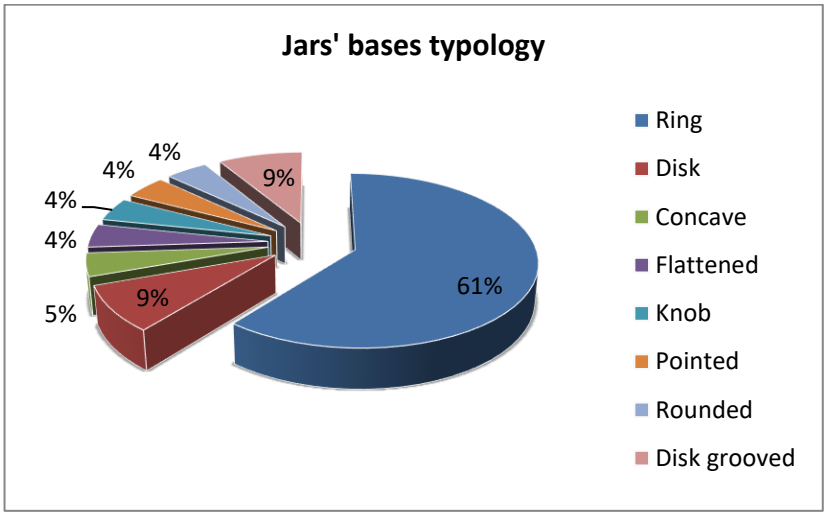
The body of the jars should also be considered: type 401 with globular wall is the most frequently used group with about 61%. The second popular type is 403 with ovoid wall presented on 13% of the sherds. The non-used type is 402 with cylindrical wall with 5%.[150] (Graph.23)

[150] OTHMAN 2018, 306.



Graph.23, Jars' Bodies typology

61% of the jars belonged to base type 200 with a ring base. Type 201 with concave base, type 208 with flattened base, type 206 with knob base, type 207 with pointed base and type 204 with round base, which are represented with 4% each, were less used forms.[151] (Graph.24)



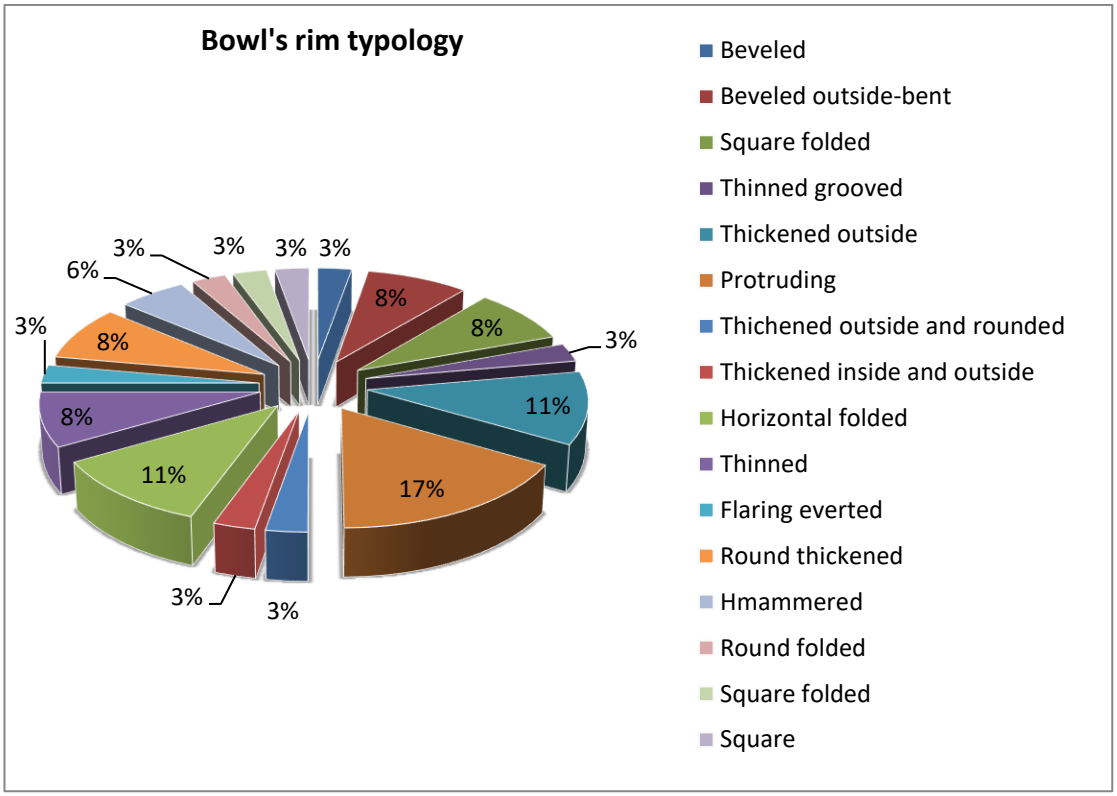
Graph.24, Jars' bases typology

Bowls

The second frequent group were the bowls which made up 25% of the material. The Neo-Assyrian common bowls belong to type 106 with a protruding rim. The second common types are type 111 with thickened outside rim and type 105 with horizontal folded rim. The non-common types are type 101 with bevelled rim, the type 121 with thinned grooved rim, type 112 with thickened outside and rounded rim, type 113 with thickened inside and outside, type 103 with flaring everted rim, type 117 with

[151] OTHMAN 2018, 307.

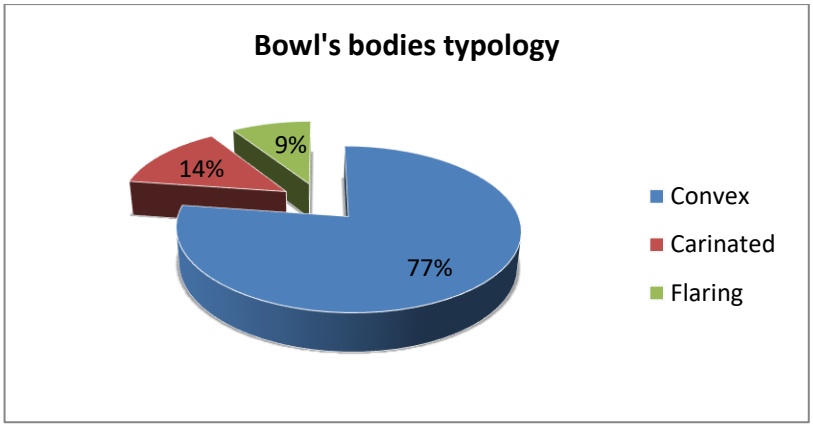
round folded rim, type 108 with trench folded rim and type 109 with trench rim all presented by 3% each. Unfortunately, a large numbers of bowl sherds miss their bodies or bases.[152] (Plate 34-39) (Graph.25)



Graph.25, Bowl's rim typology

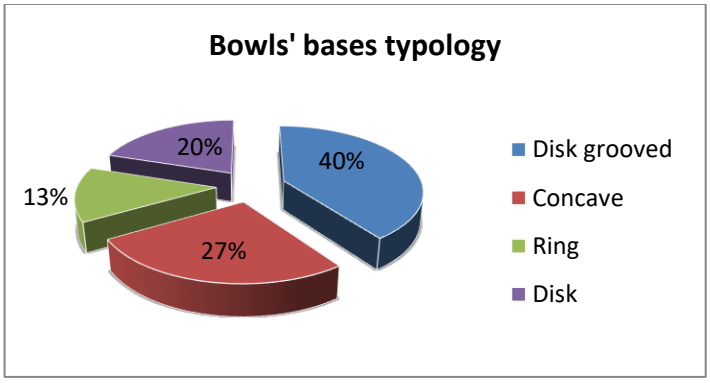
Only three types of bodies were recognizable, because in the case of most of the sherds these parts were broken off. The bowls' bodies mostly used are type 600 with convex walls on 77% of all the bodies, the second, type 601 with about 14% and carinated wall and the least used, type 602 was presented only on 9% of all sherds.[153] (Graph.26)

[152] OTHMAN 2018, 307
[153] OTHMAN 2018, 308



Graph.26, Bowl's bodies typology

The mostly used bowls bases types are type 203 with disk grooved base with 50%, the less common type was 200 with ring base which represent about 13%. (Graph.27)

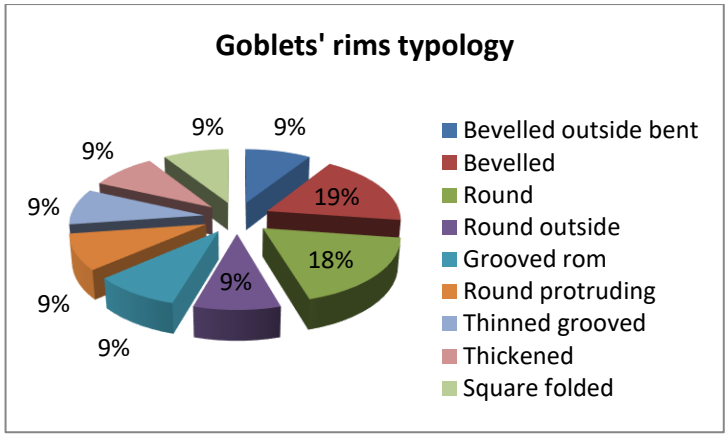


Graph.27, Bowls' bases typology

Goblets

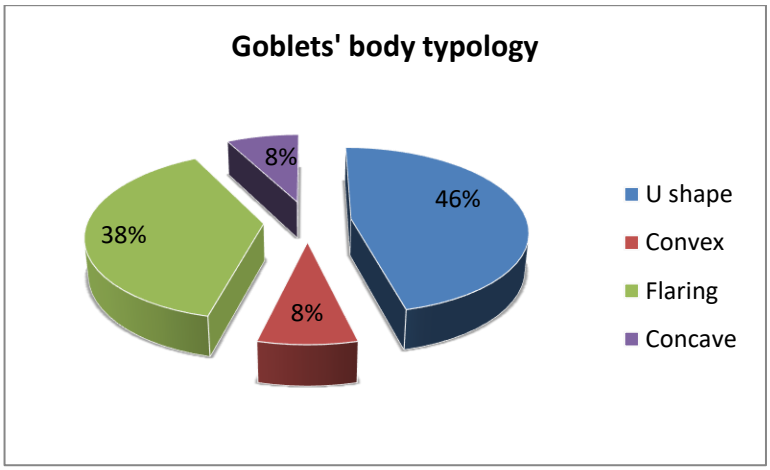
The third significant group of the Neo-Assyrian pottery forms are the goblets, which form 6% of all the material from the period. Type 101 with bevelled rim make up about 19% while type 114 with round rim 18%, which are the most common types. The less common types are 102 with bevelled outside bent, 118 with round outside rim, 107 with grooved rom, 115 with round protruding rim, 121 with thinned grooved rim, 110 with thickened rim and 108 with trench folded rim. Each of these types are represented only with 3%.[154] (Plate.41) (Graph.28)

[154] OTHMAN 2018, 313.



Graph.28, Goblets' rim typology

The commonest bodies of the goblets are 500 with U shaped walls that are 46% of the pottery. The second frequently used type is type 502 with flaring wall represented on about 38% of the goblets. The rarest type 501 with convex wall and 503 with concave wall with 16%.[155] (Graph.29)



Graph.29, Goblet' body typology

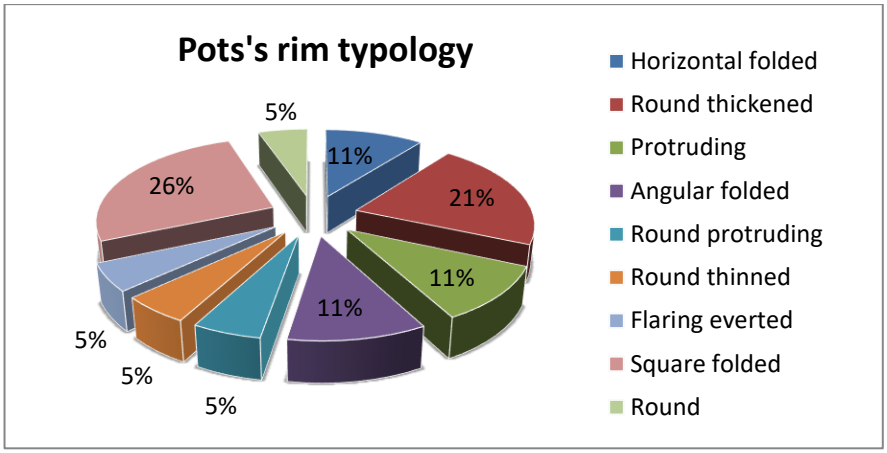
Unfortunately, only one goblet base was found, which is type 201 with a concave base. This sample of the goblet is complete and very well fabricated, and it seems to be a palace ware.[156]

Pots

Pots appear in the material of the excavations with 10% from all of the rim sherds.

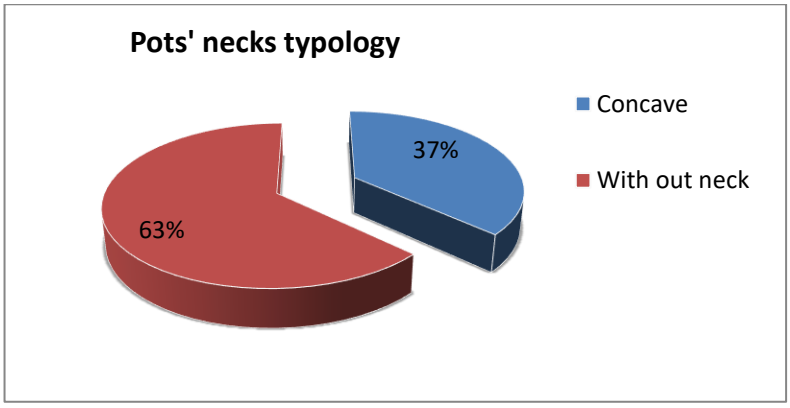
[155] OTHMAN 2018, 313.
[156] OTHMAN 2018, 314.

The most widely used rim type is type 108 with trench folded rim, which make up 26% of the rim sherds. Round thickened rims of type 119 appear on 21% of the sherds. Non-common types are type 115 with round protruding, 116 with round thinned, 103 with flaring everted and type 114 with round, each represented on 1% of the sherds.[157] (Plate. 42-45) (Graph.30)



Graph.30, Pots' rims typology

According to the neck we can distinguish types with or without a neck. Firstly, type 701 without a neck gives 63% of all the pots, while the second one, type 700 has 37%. No sherds from other categories have been found at the two discussed sites. (Graph.31)

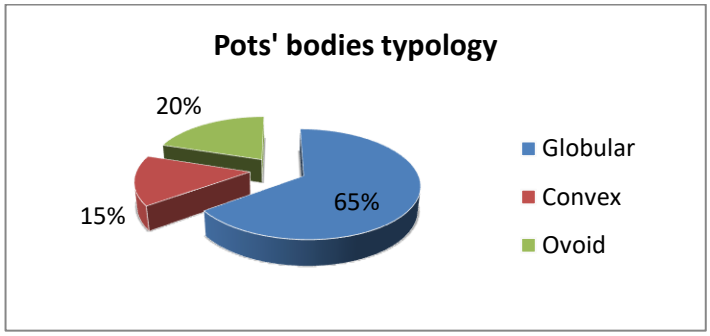


Graph.31, Pots' necks typology

The different body types of the pots could be grouped as the following: type 801 with globular walls and type 802 with ovoid wall make up 65% of the material.

[157] OTHMAN 2018, 311.

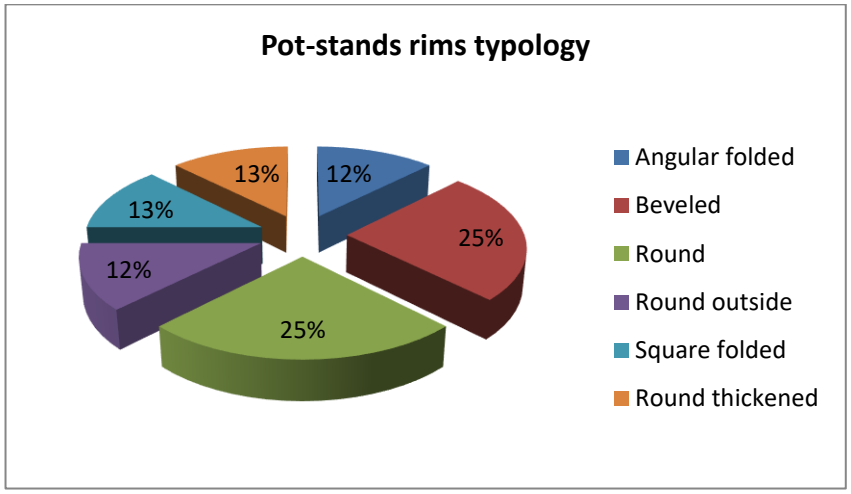
The third group with convex wall was represented on 15% of the sherds. (Graph.32) Unfortunately, no bases were found at the two studied sites.[158]



Graph.32, Pots' bodies typology

Pot stands

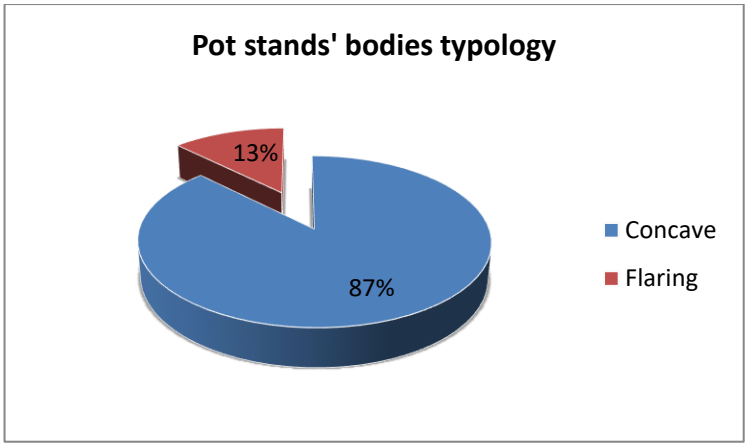
In general, pot stands present only 4% of all shapes, the most popular types are 101 with bevelled rim and type 114 with round rim, which form the 50% of the total of the pot stands. The smaller groups are: 108 with trench folded rim, 119 with round thickened rim both presented on 24% of the sherds. The third group is 100 with angular folded rim round outside rim with about 24%[159]. (Plate. 56-59) (Graph.33)



Graph.33, Pot stands' rims typology

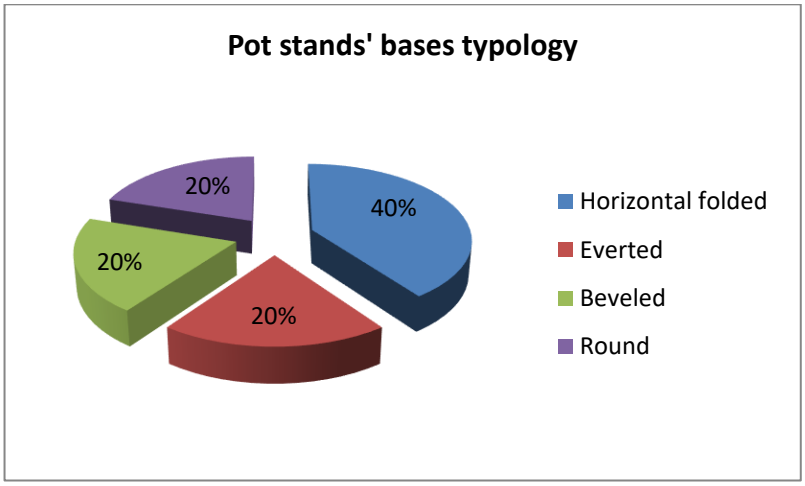
Two body types could be recognized. In particular, the most common was type 900 with concave walls which make up about 87% of the pots. It was followed by type 901 with a flaring wall, and approximately 13%.[160] (Graph.34)

[158] OTHMAN 2018, 312.
[159] OTHMAN 2018, 314
[160] OTHMAN 2018, 315.



Graph.34, Pot stands' bodies typology

Regarding the edges of the bases, four types could be distinguished, the most common is type 105 with horizontal folded rim or triangular rim (40 %). Other groups are type 103 with everted rim, type 101 with bevelled rim and type 114 with round rim, with approximately 60%.[161] (Graph.35)



Graph.35, Pot stands' bases typology

Body sherds

Body sherds have been studied as diagnostic pieces for their decoration provides information about the main types and the dating. In general, the main decoration was incised and was applied in different ways. 10% of the studied pottery was decorated this way.[162] (Plate. 60-61) (Graph. 19)

[161] OTHMAN 2018, 316.
[162] OTHMAN 2018, 316

Basins and strainers

These two types form about 2% of all the shapes, and are not common findings. Only two basins have been found, with straight and conical bodies as well as with trench rims. The strainer has carinated body and thickened rim. (Plate. 40)

6.3.4. Rims' typology

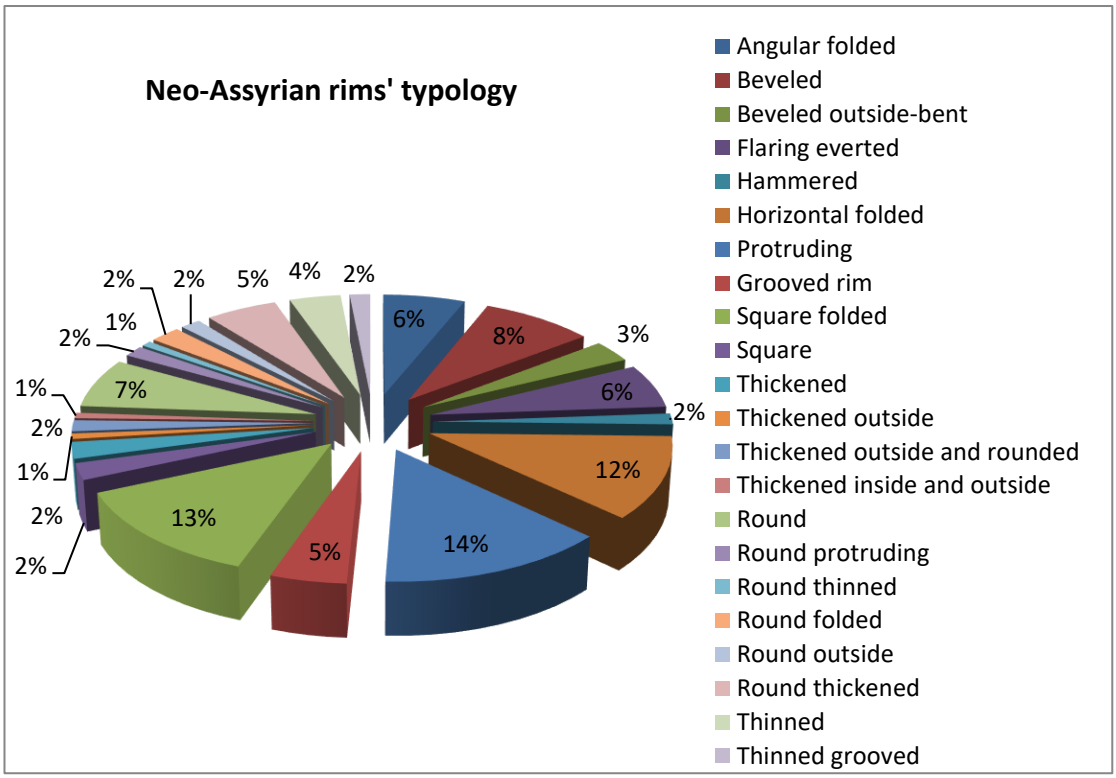
As the result, twenty-five different types of rims have been recognized. The Neo-Assyrian potters used numerous types of rims which were categorized by their frequency at the given sites. The most common rim was type 106 with protruding rims which formed 14% of the whole material, and was followed by type 108 with trench folded rim (13%), type 105 with horizontal folded rim (12%), type 101 with bevelled rim (8%), type 114 with round rim (7%), type 103 flaring everted rim and type 100 with bevelled rim (6%), type 119 with round thickened and type 197 with grooved rim (5%), type 120 with thinned rim (4%). The other types, such as 104 with hammered rim, type 109 with trench rim, type 110 with thickened rim, type 112 with thickened outside and rounded, type 115 with round protruding rim, type 117 with round folded, type 118 with round outside rim and the type 121 with thinned grooved rims, all represented on 2% of the sherds.[163] (Table.11 and 12) and (Graph.36)

Rims' typology	**Types**	**%**
Angular folded	Type 100	6
Beveled	Type 101	8
Beveled outside-bent	Type 102	3
Flaring everted	Type 103	6
Hammered	Type 104	2
Horizontal folded	Type 105	12
Protruding	Type 106	14
Grooved rim	Type 107	5
Trench folded	Type 108	13
Trench	Type 109	2
Thickened	Type 110	2
Thickened outside	Type 111	1
Thickened outside and rounded	Type 112	2
Thickened inside and outside	Type 113	1

[163] The typology studies have been done by the researcher bases on the excavation seasons works on the potteries by Lumière University Lyon 2, Ecole pratique des haute études and Ludwig Maximilian University of Munich. Othman 2018, 316-319.

Round	Type 114	7
Round protruding	Type 115	2
Round thinned	Type 116	1
Round folded	Type 117	2
Round outside	Type 118	2
Round thickened	Type 119	5
Thinned	Type 120	4
Thinned grooved	Type 121	2

Table.11, Neo-Assyrian Rims' Typology



Graph.36, Neo-Assyrian Rims' typology

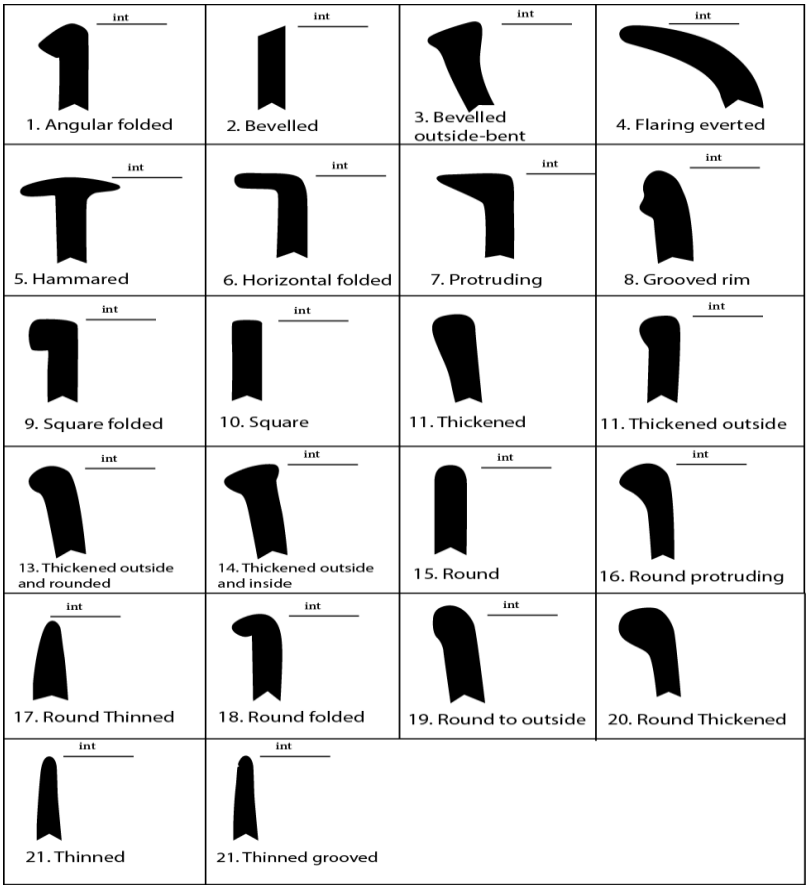
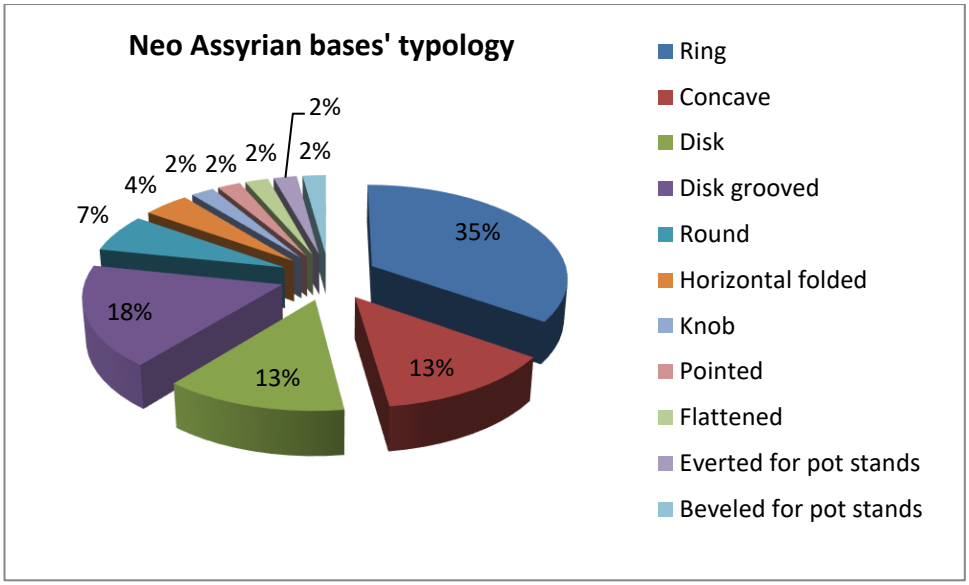


Table.12, Diagram of Neo-Assyrian rim typology.

6.3.5 Bases typology

The bases are one of the main morphologically important parts of the vessels, for they suggest possible reconstruction of the sherds. Different types have been identified. The most common is type 200 with ring base (35%). Other, less-common forms are type 203 with disk grooved base (18%), type 201 with concave base and type 202 with disk base (13%), type 204 with round bases (7%), type 205 with horizontal bases for the pot-stands (4%), type 206 with knob base and type 210 with bevelled base for pot-stands (2%).[164] (Plate. 62-65) (Graph.37) and (Table.13)

[164] OTHMAN 2018, 320.



Graph.37, Neo Assyrian bases' typology

Bases' typology	**Types**	**%**
Ring	Type 200	35
Concave	Type 201	13
Disk	Type 202	13
Disk grooved	Type 203	18
Rounded	Type 204	7
Horizontal folded	Type 205	4
Knob	Type 206	2
Pointed	Type 207	2
Flattened	Type 208	2
Everted for pot stands	Type 209	2
Beveled for pot stands	Type 210	2

Table.13, Neo-Assyrian Bases' Typology

6.4. Comparison the Middle and Neo-Assyrian morphology forms

The morphology of these periods has changed during the time. Firstly, the main attributes of the Middle Assyrian pottery were influenced by the Mitannian tradition, and later influenced the Neo-Assyrian potters as well.

During the Middle Assyrian period the rims took thick and trench forms but in the Neo-Assyrian period the rims appeared as thin and round. The most characteristic rims of the Middle Assyrian period were type 1010 with a round outside, type 1008 with round shape and type 1013 with trench shape. For the Neo-Assyrian time the most common rims were type 106 with protruding form, type 108 with trench folded form and type 101 with bevelled form.

In both discussed periods the shapes of the neck, such as concave, cylindrical, conical and flaring, were the same. Though the types were the same, there were significant difference in the size, for example the Middle Assyrian necks are shorter and wider than the Neo-Assyrian ones.

Numerous body forms were classified for both periods, such as convex, globular, cylindrical and ovoid. The study showed that while the Middle Assyrian vessels have a more ovoid body, the Neo-Assyrian once are more globular.

Same type of bases could be observed from both periods, but sometimes on different vessels. The bases of the Middle Assyrian ceramics are typically a nipple, knob and disk base, in contrast to the Neo-Assyrian bases, which are bigger and higher than the previously excited ones.

The special type of Assyrian pottery, the palace ware was also present at Kilik Mishik. The ware generally has an eggshell thin wall, fine temper, was wheel thrown and fired well, and was rather difficult to manufacture. The first scholar to distinguish this type of Neo-Assyrian table ware from the less fine pottery of the period was Rawson. Mainly jars and bowls were made out of this material, but at the site only one piece has been found, a rim with its neck, which was painted red. (Plate 49, Fig. 00549) The presence of the palace ware raises multiple questions, such as the origin, the distribution and the use. One can suggest, that the piece found probably arrived to the site by trade, and it might had been originated in the palace of Nimrud, Assur, or Nineveh, for they are the closes to Kilik Mishik. The usage of the palace ware, as the most elite pottery of the period, also indicates that a Neo-Assyrian palace existed at the site, probably even under the control of a local king. Regarding the morphology of

the sherd it can be classified as type C2, according to Hunt, with a globular body and everted and thinned lip. The width of the wall is 0,30 cm.[165] The function of the vessel could not be identified for the characteristics such as the inclusions, the capacity and the content could not be determined, but this form was usually used for pouring out wine for the members of the elite.[166]

The unique form of the tripod jars appeared in the Middle Assyrian period, but the usage of this form continued in the Neo-Assyrian times as well, though later it was only used as a base for the bowls. In general, their shape is globular with a concave neck, the orifice is small with everted or bevelled rims, and they were usually stood up on their three feet. For the clay fine tempering material was used, and the vessels were formed and smoothed well. The morphology indicated the function of the vessel, that it seems to be used for religious custom or for other ceremonies. Samples of this form group were found in Sheikhi Choli vaulted tomb, and had a connection to the deceased people or the funerary ritual and custom. Inside the vessel black colouring and traces of offered wine were observed.

[165] HUNT 2015, 96.
[166] HUNT 2015, 89-93.

7. Technical aspects of pottery production

7.1. Preparing of the clay

Clay is a natural earthy material that is plastic when wet, consisting essentially of hydrated silicates of aluminium. It has natural mineral inclusions which derived from primary rocks: granite, feldspar, mica and quartz. In addition, there are many stones which have a homogeneous structure, which means the only contained one main type of mineral materials.

Examining the organic and mineral inclusions, the mineral inclusions are sub-divided into two groups: the natural and the additive inclusions. For the organic, the crust layer of the earth naturally contains organic inclusions such as dead roots, different remains of vegetation, etc..[167] The potter would therefore come to clean the clay from all the natural inclusions and then immerse it in the water to get the required plasticity.[168] The plasticity was required for the potter to create vessels from the natural clay material.[169]

From the examination of the samples from Kilik Mishik it is visible that the used inclusions were both natural and added. They used the clay which was accessible around the Tell and brought the mineral stones from the bank of the streams that was passing the Tell from the southern side. For the organic inclusion, they used the chaff, and other organic materials from the plains around the settlement. It is likely that they collected it during the harvest season and stored it for later use. The plain around the Tell is rich in the sources of mineral and organic inclusions; therefore the inhabitants of the site profited from it and utilized them for their needs.

7.2. Fabric groups

During the study of the materials, eight fabric groups could be identified and were categorized with letters (from A to H). This classification is based on the percentage composition of the organic and mineral inclusions. (Table 14 and 15).

[167] RICE 1987, 54.
[168] MODESTO – BERNARDIN 2008, 15.
[169] SCHWARTZ 1952, 41.

7.2.1. The inclusions

The inclusions are composed of organic and mineral tempers. By using microscopic analysis, eight groups and techniques have been identified. (Table 16 and 17)

In general, there are two types of inclusions; the natural and the additive, which are rather hard to distinguish from another. The characteristics of the inclusions allow the determination of the origin of the particles, and the sources of clay as well. Based on several aspects, for example the shape and the amount of the temper, distinguishing of the natural and additional inclusions is possible. Although, the shape of the natural mineral inclusion is tending to be generally round or sub-rounded, while the additives are more angular and sub-angular shaped. The amount of the mineral temper in the case of natural inclusions is big and homogenous, while it is more regular in the case of the additives. In addition, many other types of inclusions, for example rock fragments, fired clay and volcanic ash, occur naturally in the clay[170]. As well as natural organics, such as roots, plants and fibres[171].

The main fabric groups were identified according to the percentage of tempering visible in the clay itself.

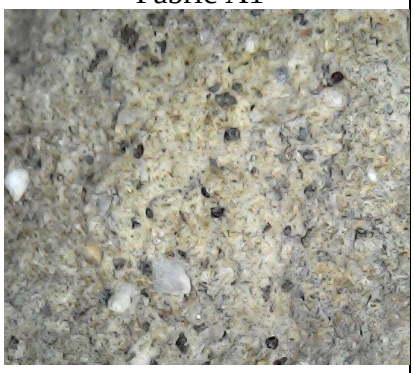
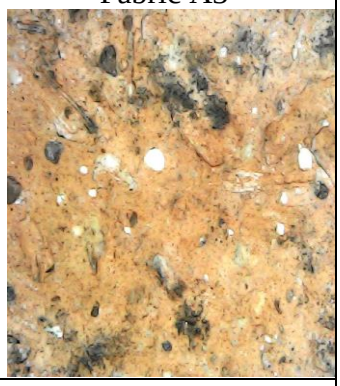
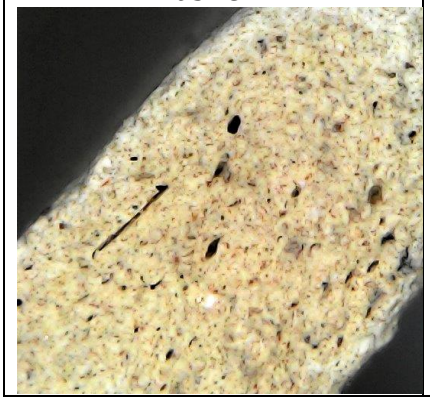
Fabric no.	Description
A1	15-50% big and small sub-angular and rounded gray and white inclusions, 2% organic temper, 1% grog.
A2	10% of rectangular vegetal temper, 1-10% small and sub-angular gray and white inclusions
A3	3-20% organic temper, 1-5% rounded and sub-angular white and gray inclusions with 2% grogs.
B	25% sub-angular white and grey inclusions, 1% organic temper
C	10-50% big sub-angular gray and white inclusions with 1% sub-angular black inclusion and 1% organic temper
D	10% big and small mineral sub-angular white inclusions, 1% organic temper
E	1% sub-angular white inclusion, 1% organic temper, palace ware.
F	1% small sub-angular white inclusion, 1% organic temper

[170] RICE 1987, 334.
[171] RYE 1976, 29, 31, 33.

G	1-5% small and big rounded grey and white inclusion, 1-7% organic temper
H	1-5% organic temper, 1-5% small white and grey sub-angular inclusion fine ware

Table.14. Fabric groups

Table 15 shows all the fabrics with their inclusions. The photos were taken under a digital microscope by magnification of 1000X.

Fabric A1	Fabric A2	Fabric A3
		
Fabric B	Fabric C	Fabric D
		
Fabric E	Fabric F	Fabric G
		

Fabric H 

Table 15: Photos of all Fabrics

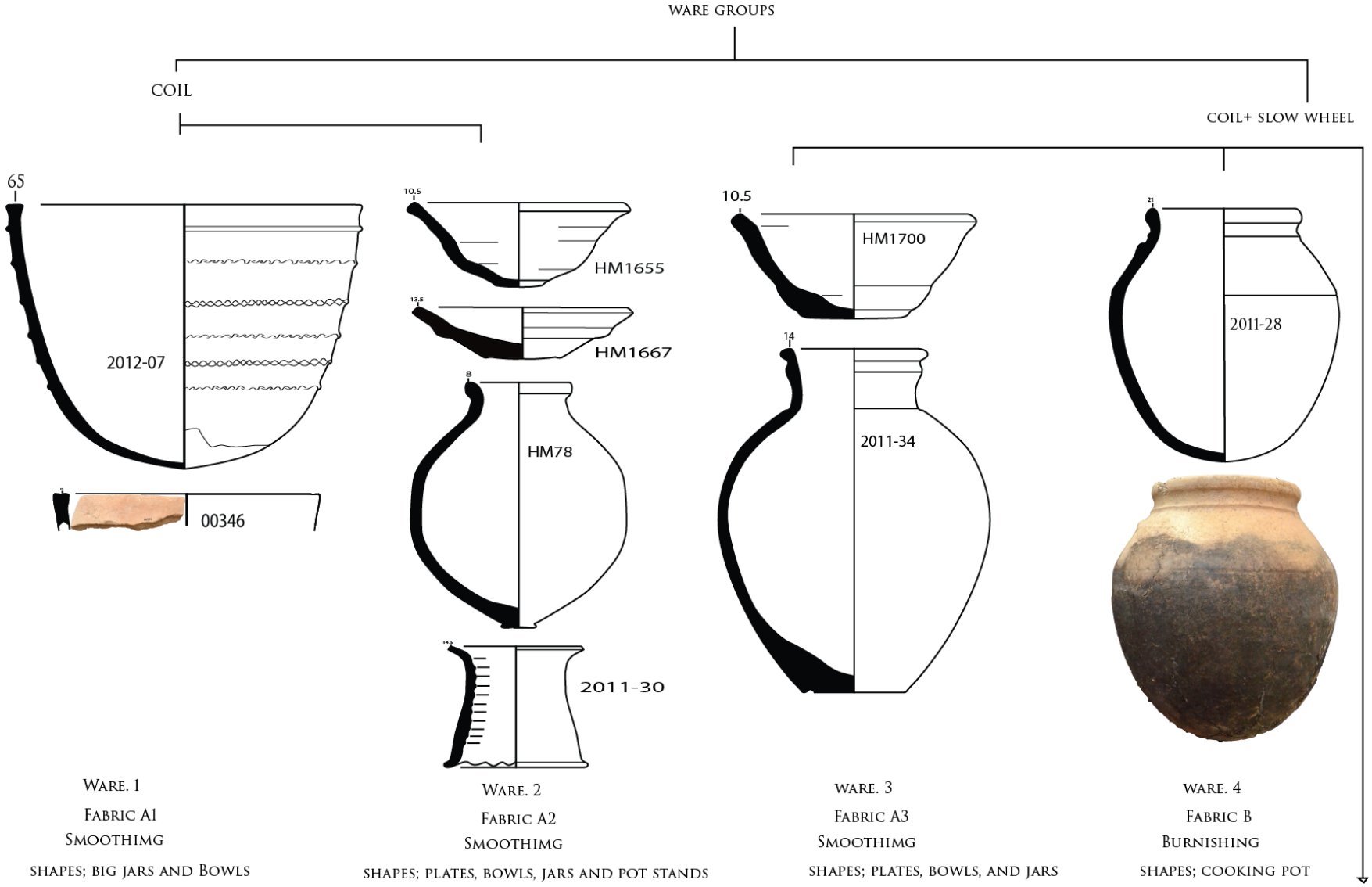


Table.16. Techno Stylistic Tree

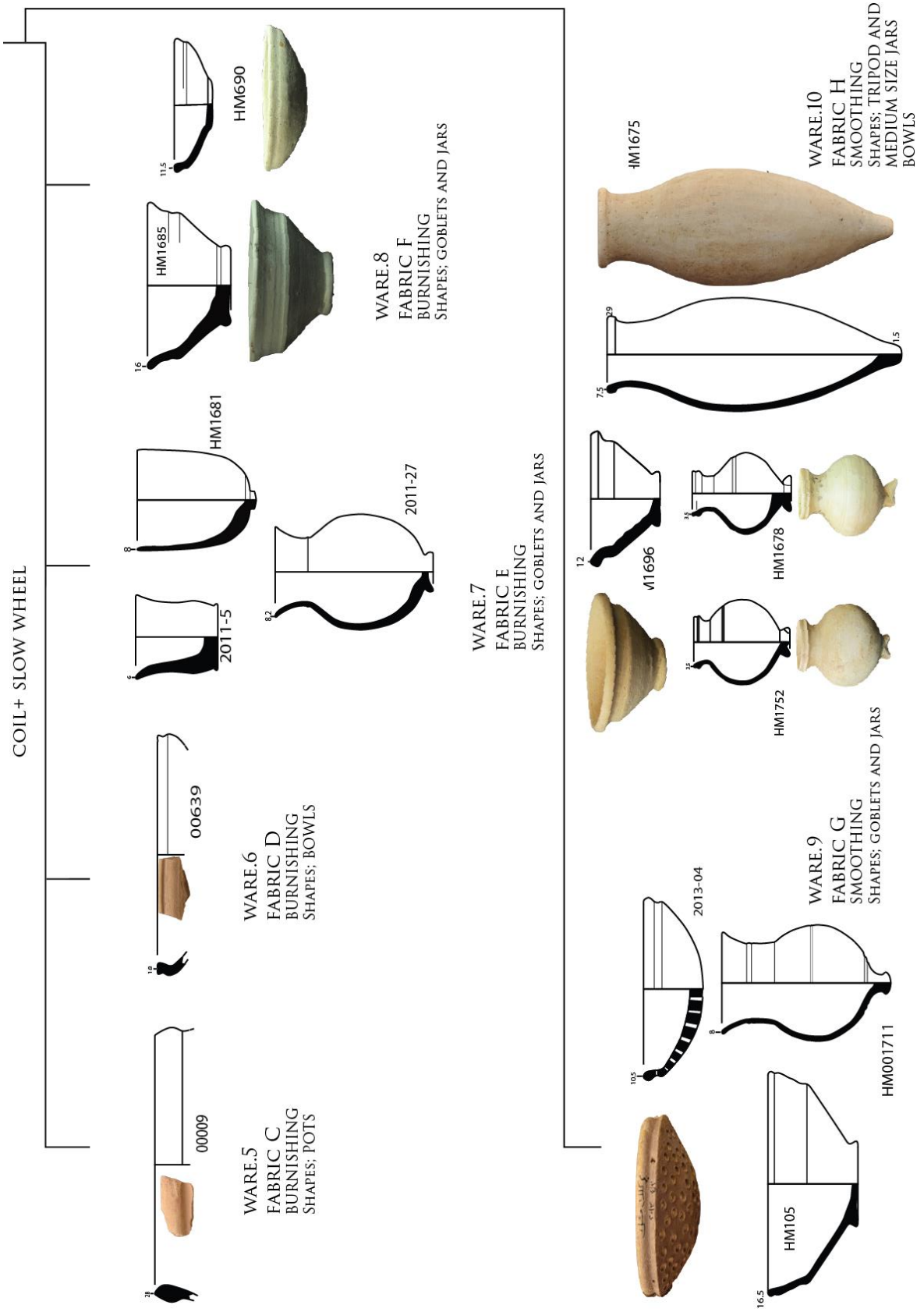


Table.17. Techno Stylistic Tree

Table 2 shows all the fabrics with their inclusions. The photos were taken under a digital microscope by magnification of 1000X.

7.2.2. Raw Material

The paste of the ceramic is composed of naturally raw materials and can be classified into two groups: the plastic and non-plastic clay.[172] The first step of the pottery production is to prepare the raw material. The choice of the clay and the temper is based on the shape, form and function of the vessels. In general, the raw materials of the ceramics are composed of clay minerals, non-clay minerals, organic material, such as chaff and heterogeneous compounds.[173]

As mentioned before, the clay minerals chemically consist of hydrous silicate of and a small amount of potassium, sodium, calcium, magnesium and iron. It is characterized by its high plasticity.[174] The minerals in the ceramics can be classified into several groups: kaolinite, clay-mica, smectite, chlorite, vermiculite, allopane, sepiolite and palygorskite. The most common clay mineral is kaolinite, which is found in the majority of material. The second most common clay mineral is clay aluminum -mica that exists in argillaceous rocks.[175]

Clay, as mentioned before, occurs naturally in fine grained sediment or as an erosion product, and it becomes plastic when it is dry. The natural mineral in it is kaolinite crystal and usually can only be seen through microscope, without this substance, the clay loses its feature of plasticity and would not shrink or harden during the drying process[176].

The non-clay materials are naturally present in the clay, but the potter may add more in attempt to reduce the plasticity or shrinkage. Non-clay materials include quartz, limestone, iron hydroxide and oxides.[177] On occasions, other materials may be added:

a. **Fine sand**: Quartz is a silica mineral, usually with rounded shape such as grains. It exists naturally in the clay, but it can also be added purposefully by

[172] RYE 1976, 109-118.
[173] BONNET – GAILLARD 2001, 98.
[174] DEKKER 2002, 187.
[175] SCHULZE 2005, 246.
[176] RYE 1976, 16.
[177] RICCI 2016, 26-28.

the potter.[178] The earth around the Tell of Kilik Mishik contains naturally fine sand.

b. **Fine calcite**: is carbonate of Calcium. It exits in limestones, marble and shell.[179]
c. **Grog**: crushed pieces of broken pottery with angular shapes.[180]
d. **Mica**: a mineral which is extremely shiny and white, in gold or black colour.[181]
e. **Feldspar**: This is the most common mineral in the crust of the earth, and is present in sedimentary deposits, igneous and metamorphic rocks[182].
f. **Grit**: crushed stones with angular shapes.[183]
g. **Organic**: the most common temper which is naturally present in clay. For example garn seeds, roots and vegetable fibers. Additionally, it can be added by the potters such as support or to reduce the plasticity, and increase the shrinkage during drying and permeability. The potters used mostly chaff as an organic temper, but there were also further options. During the harvest, they collected chaff from the plain around the tell, mainly wheat or barely.

The final step during the preparation of the raw material is the adding of inclusions, temper. The source of these materials can be located close to the site, or equally so, it can lay much further away. For example: the source of additive inclusions for Tell Kilik Mishik's pottery production appears to be mainly the stream south from the site, which was a rich source of stones and smaller rocks used for tempering. After the collection, the stones were crushed, sieved and coarser particles were removed.[184]

7.2.3 Texture

The term texture in the case of pottery production should refer to surfaces of the ceramics with different textures, such as the following types:

Fine

The ceramics of this group have an even surface and compact fabric. There are no inclusions, or they are not visible in the material. The inclusions can only be observed under microscope. The clay itself is usually fine, the walls of the vessels are thin and

[178] HEIDKE - MIKSA 2000, 273.
[179] RYE 1981, 32.
[180] RYE 1981, 33.
[181] ARAYAPHONG – MCLAREN – PHELPS 1984, 1181.
[182] SCHRAMM – HAL 1936, 159.
[183] RYE 1981, 86.
[184] RYE 1976, 17.

smoothed well. For the firing usually oxidizing atmosphere was used. It was mainly used for fine and small vessels, such as goblets and small jars used for drinking purposes, which were mainly handcrafted.

Medium

This type has an even surface with visible, medium sized inclusions. It is usually associated with common ware because the quality of these could be reached easily, and this is the most common in the material. They used medium quality clay for creating medium sized vessels, such as jars, bowls and strainers for daily use. They used oxidizing or semi-oxidizing atmosphere for firing.

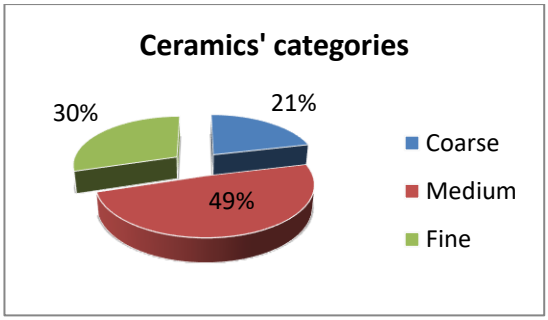
Coarse

This kind of texture is characterized by a rough, fractured surface and large, clearly visible inclusions. This type is present in huge number, and was primarily used for big vessels, which required thicker walls and more mineral and organic temper. such as storage jars, basins, plates, pot-stands and covers. The quality of the clay is not suitable to fabricate small sized vessels. Mainly semi-oxidizing atmosphere was used during the firing of these vessels.

The inclusions are related to the texture and it made the potter able to choose different types of clay with variable quality to certain types of vessels. In most cases the examination of the texture itself can suggest the function of the vessel it was used for.

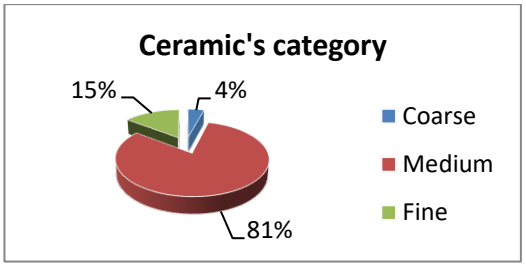
The distribution of the Middle Assyrian sherds into the three main groups is the following: the biggest group with the most sherds is the medium group with 49% of the material dated to the Middle-Assyrian period. The second highest number belonged to the fine texture group, which characterized approximately 30% of the ceramics. Most samples from this type – coming from the Sheikhi Choli vaulted tomb – are complete and well-manufactured. The least wide group, with about 21% of the material, is the one with coarse fabric. The fabric groups and ware types will be presented below more precisely.[185] (Graph.21)

[185] RICE 1987, 72.



Graph.38, Middle Assyrian ceramics' categories

Regarding the Neo-Assyrian pottery 81% of the material belonged to the medium textured ware, while fine texture was observed in the case of 15% of the pottery. Coarse fabric in this period was quite rare, and is only visible on 4% of the sherds, which equal to 4 pieces.[186] (Graph.49)



Graph.39, Neo-Assyrian ceramic's category

7.2.4. Measuring the inclusion

The method of measuring, counting and estimating the percentage of the inclusions – mineral and organic – in the material, the clay is the following: During the process the inclusions are determined according to the method used at Grdi Bazar, Peshdar Plain, with a magnifying glass LED 5XL with a manual and practical system. The same data could be achieved by using thin section analysis of the pottery as well. It is suitable to get the percentage of different tempering, and to measure the percentage of the different inclusions in the clay. It helps to determine the various fabric groups from very coarse to very fine ware relying only on the intensity and the nature of tempering (Fig.30)

[186] RICE 1987, 72.

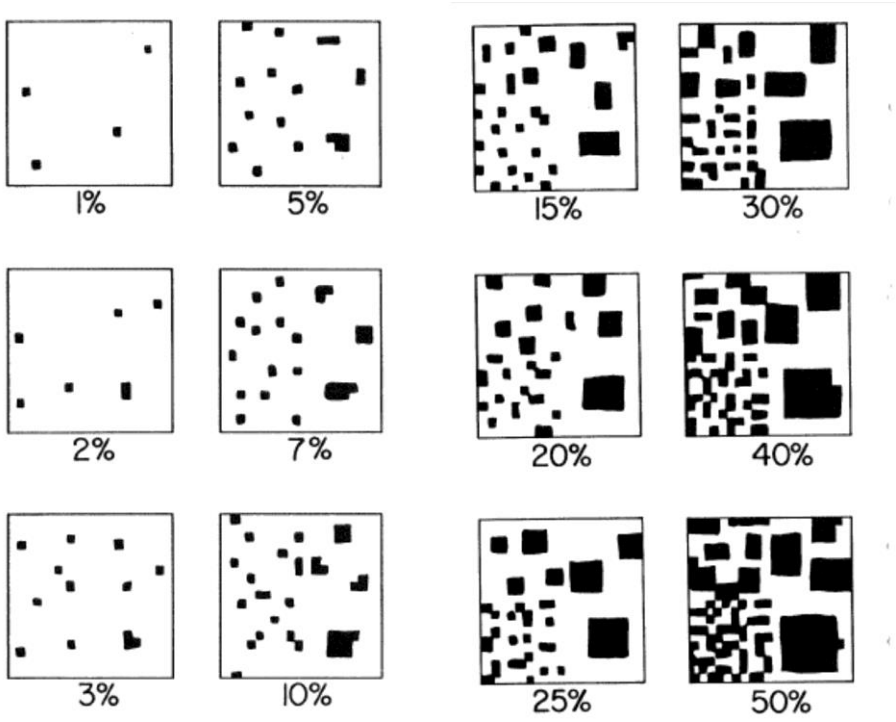


Fig. 30: The estimate percentages of Inclusions to determine the fabric groups, Munsell colour chart 1994, 9-10.

7.3. Shaping techniques

The different types of ceramics, the different textures and tempering required several types of shaping to create vessels for various use. These categories fortunately can be easily identified from their surfaces and shapes, which have traits which distinguish the formation of the vessels.[187] The main types of shaping techniques are the following: (Graph 40)

Throwing

This technique was primarily used to produce bowls and jars, either small or medium sized, and were made in bigger quantity. The horizontal parallel lines on the surface indicate the use of a fast potter's wheel. The slow wheel method can also be detected on some of the vessels with interrupted horizontal parallel lines. Both the fast and slow wheels left spiral lines on the outside surface of the bases. The fractures are always uneven.[188] (Fig.31 a, b, c and d). The formation of the bases had different methods: in some cases they were cut from the core, which left spiral marks on the surface, in other cases (for example the ring bases) the potter added a coil from the same or a different type of clay to the finished vessel. In general, both the slow and

[187] RYE 1981, 96-110.
[188] SARASWATI 1978, 5.

fast wheel methods have been used most extensively in the Neo- and Middle-Assyrian pottery production at Kilik Mishik. The potters from these periods were well experienced in the use of both methods.[189]

Spiral inside

Fig.31a, after Pshtiwan , fig. 91

Spiral outside

Fig.31b, after Pshtiwan , fig. 94

Cutting from the core

Fig.31c, after Pshtiwan , fig. 101

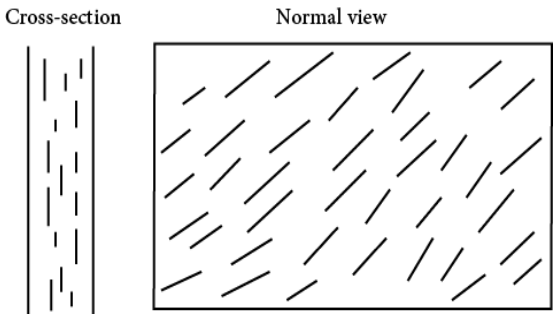


Fig. 31 d, Preferred orientation of inclusions associated to thrown from the wheel.

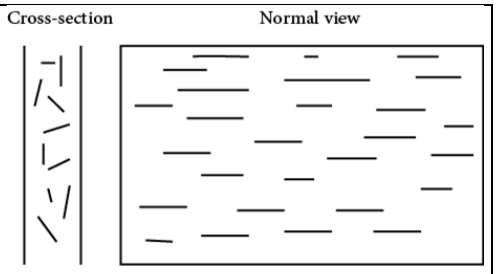
Fig. 31: Thrown vessels

Coiling

This technique is the traditional technique for the production of bigger jars, basins, and pot-stands. The vessels are created by adding the coils one above the other, and joining and smoothing them together with the use of water before the drying is completed.[190] The potter achieved the best quality by using the slow wheel for smoothing the surface after joining the coils together. This technique was used during both the Neo- and Middle-Assyrian period. The traces of cracks and fracturing indicate the use of this shaping method, which often occur at the joining of two coils.[191] (Fig.32 a and b)

[189] RICE 1987, 124-136.
[190] GIBSON - WOODS 1997, 126.
[191] BLANDINO 1984, 8.

A. Samples show trace of coiling

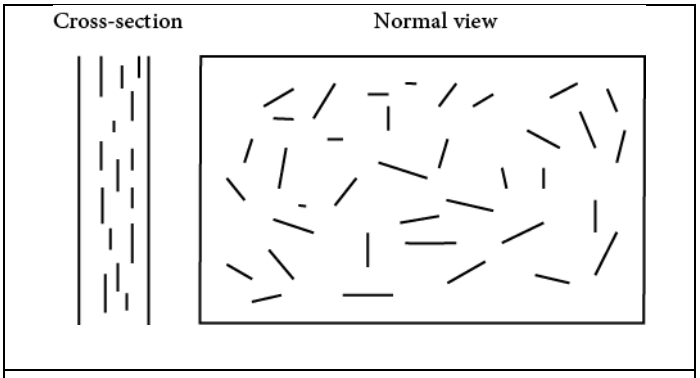


B. Parallel orientation of inclusions associated to surface of coiling technic.

Fig.32. The Coiling processing

Slab building

This technique was used mainly for producing larger and more stable jars. The potter starts to form the larger vessels at the rim, and creates the body of the vessel in three or four parts, and then links them all together with the help of water. The production is sometimes separated into different stages, initially making the rim, followed by the body and finally the base. To improve the stability of the larger vessels, the potter decorated the rims with rope decoration by adding coils under the rims with a depth of about 10 to 20 centimetres. The walls of these vessels often became uneven because it was rather hard to even out the walls of different thicknesses at the end. For example, if we look at the basins, sometimes the bases are thicker than the walls but this is usually the result of using different production methods for different sections. (Plate.13, Fig.2012-07) This method has been observed at Kilik Mishik in both investigated periods. For the Neo-Assyrian period, the larger jars were inserted into the ground, but for the Middle-Assyrian period, the coffins from the Sheikhi Choli Tomb and the open irregular jars have been shown to be good examples. The fractures of the vessels are always even, and usually of the same size, because the vessels were put together from many smaller parts and cracks usually occur between the different slabs. (Fig.33)



F.33, The Random orientation of inclusions associated to surface of slab-building technic.

Handcrafting from several pieces

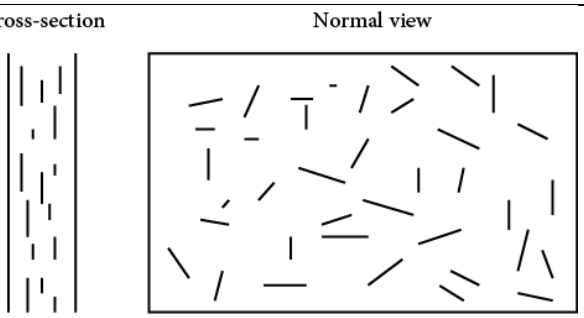
This technique is similar to the pinching method and has been used mainly for the formation of big storage jars, handles and spouts. Sometimes the coil technique was used to achieve the same effect. The potter made the base separately from the body, which was made by a slow wheel, and the other parts were made out of coils. The traces of finger impressions between joined parts has been observed both on the inside and outside of the vessels. For this technique they utilized all the advantages of the previously mentioned techniques. Aside from the storage jars, handles and spouts, other vessels such as trays, plates, large pots and lids was this method used for. In addition, all the decorations and the holes on the bases, as well as the holes for the strainers, were made by using hard tools and piercing from the outside through the walls of the vessel.[192] (Fig. 34, a and b)

Pinching

This is the simplest technique used by the potters. A lump of clay was simply moulded into the required vessel shape.[193] It involved shaping the rims and the opening of the vessels with thumbs and fingers, even between fingers of opposing hands. This technique was often used in the formation of small vessels and the bases of big vessels.[194] (Fig. 34, a and b)

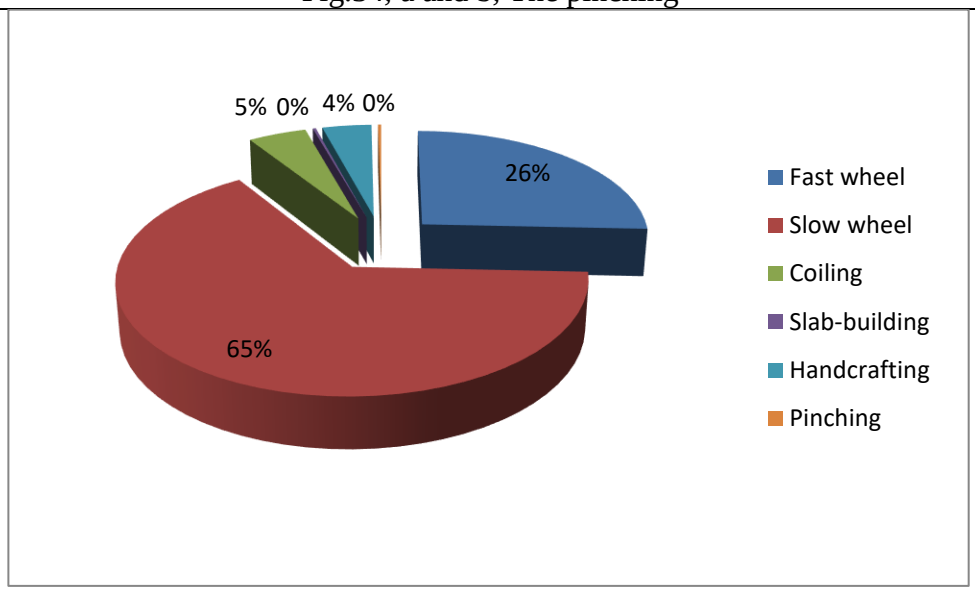
[192] BERG 2008, 1178.
[193] FEWKES 1940, 172-173.
[194] STERN 1951, 12-13.

A



B. Random orientation of inclusions associated to surface of pinching technic.

Fig.34, a and b, The pinching



Graph 40: Shaping techniques

7.4. Surface treatments

The surface treatments of the vessels also indicate the type and the function of the piece. We can distinguish smoothing, burnishing, planning, scraping, slip, glaze, and several other surface treatment methods.

Smoothing

This type of surface treatment was usually carried out by using stones or bones on the surface after drying. On most of the fine wares at Kilik Mishik and Sheikhi Choli vaulted tomb traces of this technique are visible.[195]

Burnishing

This technique could be observed on the material from Kilik Mishik. Hard blunt tools or leather were used for the smoothing of the surface and clearing it from

[195] RICE 1987, 138.

the inclusion appearing on the outer walls of the vessels. The striation traces of this technique are quite prominent, which can be observed on the ceramics as horizontal lines on the upper part, and vertical on the lower.[196] This mostly appears on the outside of the pots and sometimes on both sides of the bowls.

Planning

This technique can be identified by the deep vertical lines on the lower part of the vessel. This occurs because the potter removed the lower part of the vessels which yielded uneven walls and made the lower part thinner than the upper part. This was used for the closed jars as well as the medium jars.[197]

Scraping

All ceramics passed the scraping processes before they were allowed to dry.[198] After that they were watered either with a wet hand or a small cloth.[199] This method was used on both surfaces of the pottery by removing the outer layer through the use of hard tools such as sherds of ceramics whilst the clay is soft. When the clay had coarse inclusions, it produced deep lines. Different tools produced different marks upon the surface, for example if the scraping was done by using a comb, it produced incised lines.[200]

Slip

Another type of surface treatment is the slip, when a small part of a vessel or all the body was applied with a thin clay layer, from the same (self-slip) or different material as the vessel itself.[201]

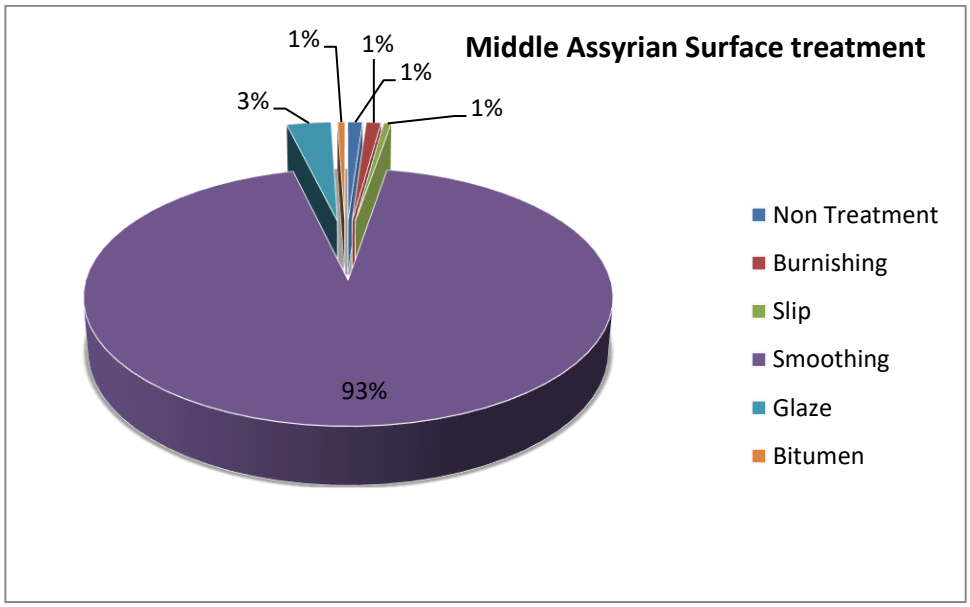
Glaze

The glazed surface is covered by a layer of thin glass. The glazed ceramics from Tell Kilik Mishik, which date to the Middle- and Neo Assyrian period, are green and blue, while the ones from the Sheikhi Choli vaulted tomb have a dark blue colour. Nevertheless, for the influence of external factors such as atmosphere and weather, the colour of the glass was eroded from some of the vessels.[202]

During the study of the pottery from the Middle Assyrian period six types of surface treatments were distinguished. Only 1% of the sherds were not treated in any

[196] RYE 1981, 90.
[197] RYE 1981, 72.
[198] RICE 1987, 137.
[199] RYE 1981, 86.
[200] RICE 1987, 136-140.
[201] SCRIPTURE – SCHRARNM 1926, 174.
[202] RICE 1987, 232.

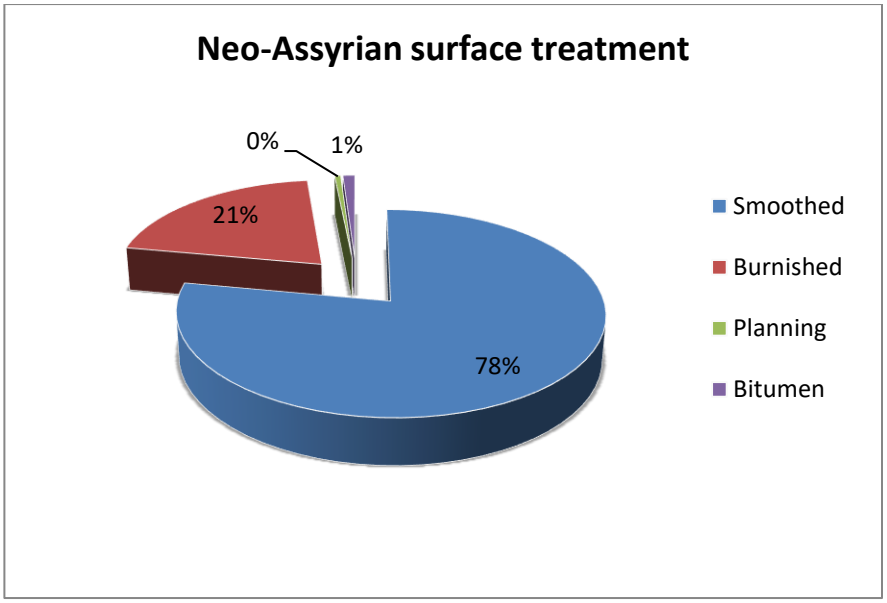
way, which shows the quality level of the pottery production. The burnished and slipped sherds, which are one of the most interesting sherds regarding the methodology of pottery making, are presented on 1% of the material as well. Also 1% of the ceramics were coated with bitumen either on the in or out side. On the contrary almost all the vessels and sherds, approximately 93% of them were smoothed on the surface. The last, and arguably the most significant type is the glazed pottery with 3% of the material, which were mainly complete vessels giving a wide range of information regarding the morphology, the material features and the use.[203] (Graph.41)



Graph 41: Middle Assyrian ceramics surface treatment

Unfortunately, no glazed pottery from the Neo-Assyrian times has been found at the sites. Smoothing is the most common surface treatment observed on 78% on the sherds. 21% of the material was burnished which shows a significant grow compared to the previous period. 1% of the sherds were coated with bitumen, and only on one sherd were no traces of treatment observable.[204] (Graph.42)

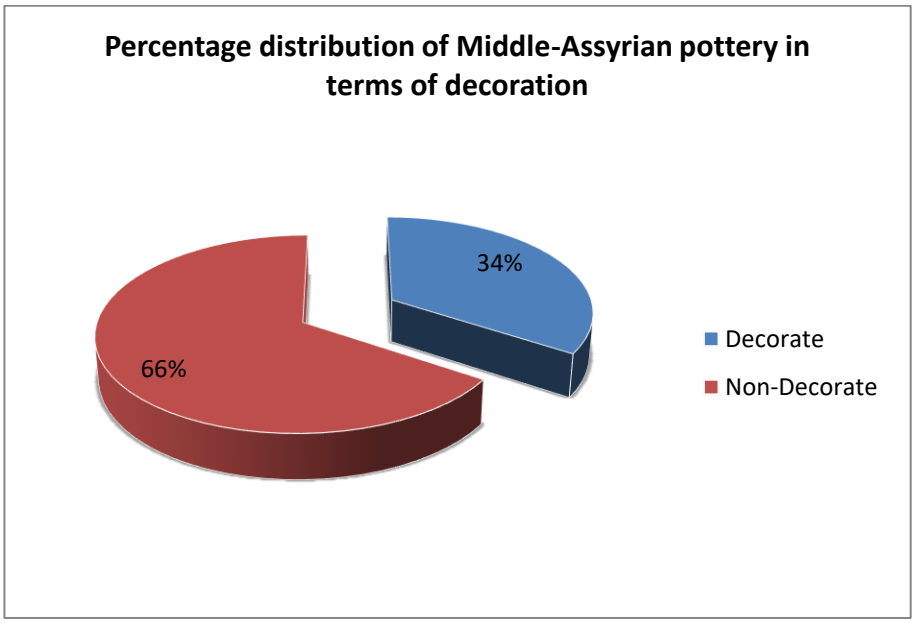
[203] CURTIS 1963, 1-27, RICE, 1987, 144.
[204] CURTIS 1963, 1-27, RICE, 1987, 144.



Graph 42: Neo-Assyrian ceramics surface treatment

7.5. Decorations

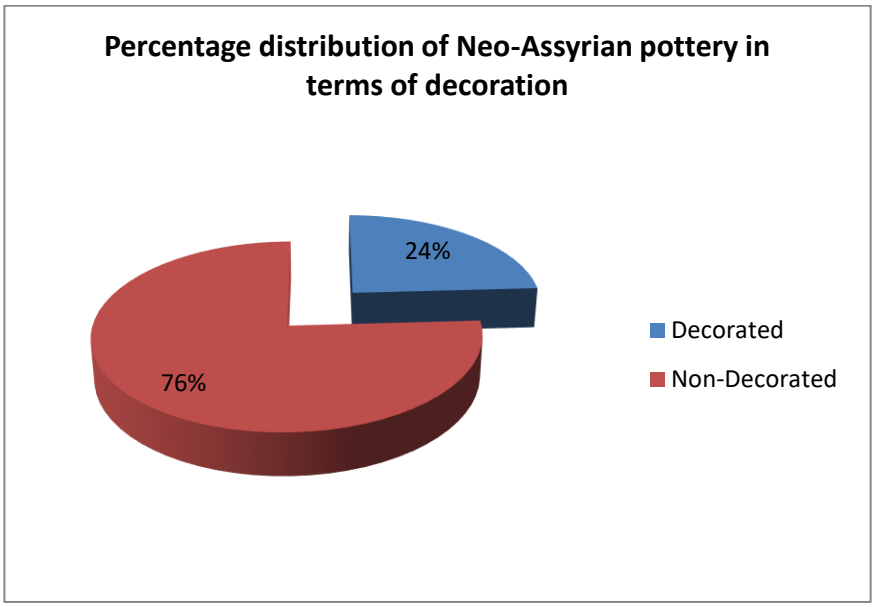
Only a small amount of the pottery from Kilik Mishik and the Sheikhi Choli tomb was decorated but it was just enough to examine most of the motifs that were generally used.[205] In the case of the Middle-Assyrian ceramics, 34% of the sherds were decorated and 66% didn't. This is displayed on (Graph.43).



Graph.43: Percentage distribution of Middle-Assyrian pottery in terms of decoration

[205] RICE 1987, 249-252.

The samples of the Neo-Assyrian ceramics showed fewer evidence of decoration, with only 24% of the sherds belonging to this group. 76% were not decorated. (Graph.44)



Graph.44: Percentage distribution of Neo-Assyrian pottery in terms of decoration

The results of the examination of the decorations allowed us to classify the sherds into various categories. There were specific methods used to produce the designs which are explained below:

Incising

These marks were carried out by creating mostly horizontal lines using a blunt or slightly sharper object. Many vessels were decorated this way, with the incisions mainly appearing on the shoulder and the body of the vessel. Sometimes the patterns were irregular. Instead of straight horizontal they were occasionally applied as wavy lines.[206] The horizontal and wavy lines were carried out with the help of the rotation of the wheel. 27% of all sherds were decorated this way.

Applying

The applied decoration was carried out by adding shaped pieces of clay onto the surface of the vessel. The decoration was added before the vessels were completely dry. They were also sealed to prevent cracks and fractures at the point in which they were joined to the body itself. Sometimes the applied decoration just consists of a thick rope. Only on 13% of all the decorated sherds is applied decoration presented.

[206] RICE 1987, 387.

Painting and Coating with bitumen

The painted decoration occurred on many of the vessels from the Middle-Assyrian period and was applied through rotation of a potter's wheel. Bitumen was occasionally used by the potter to either fix broken vessels or with applying it on the inside surface reduce permeability. The painted motifs are visible on 21% of sherds whereas bitumen is included on only 7%.

Impressing

This is the appearance of fingerprints on the body of the vessels and has been mostly observed on the lower part of the pot-stands. It is the category which has the least number of sherds, only 5% represents this category.[207] (Graph.40 and Table 18)

Grooving

The grooving method is usually carried out by the use of bones or blunt tools. Many vessels were decorated using this method, most commonly around the rim, under the rim, on the neck, on the shoulder or on the base. A combination of grooved and incised lines was often carried out together. They are presented only on 13% of the decorated sherds.

Moulding

The moulded decoration method requires preparation and application of the decoration to the surface of the vessels before firing. Like the impressed decoration, it only makes up 5% of the total material.

Glazing

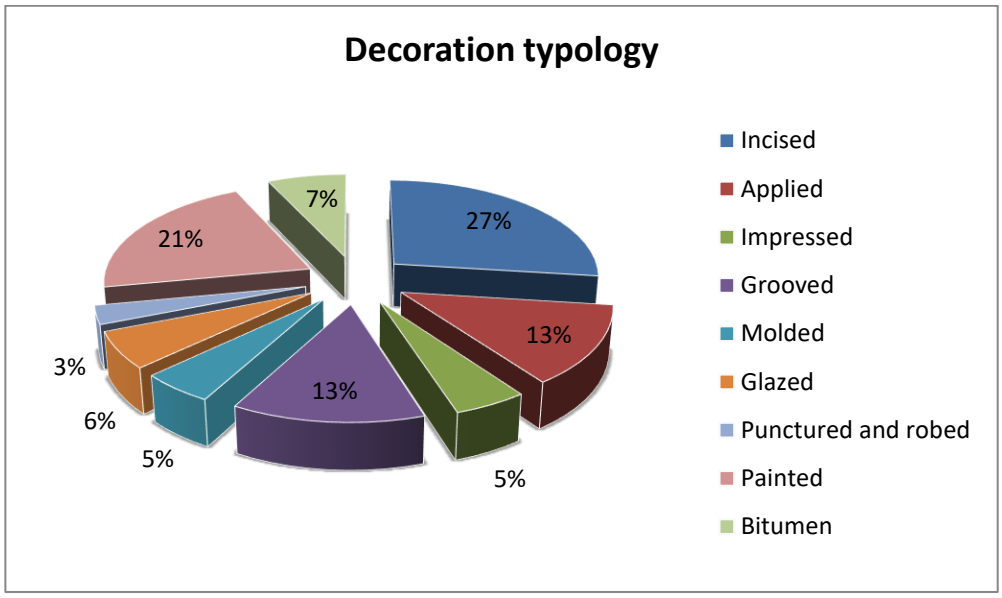
The complete vessels from the Sheikhi Choli Tomb are good examples of glazed vessels, though few examples were found, but because all of the samples are complete vessels, we can gain a considerable amount of information. Glazed techniques only appear on 6% of decorated sherds. There are several ancient methods for glazing the vessels, which are the following:

1. **Dipping vessels into glaze:** Dipping pottery into a fluid glaze, about the consistency of heavy cream, is one of the fastest ways to glaze large quantities of pottery. It is also the most suitable method to ensure an even glaze coat.[208]
2. **Pouring glaze in and on the vessel:** Glazes for pouring need to be of the same consistency as dipping glazes and are often made in close connection with

[207] ASMAH 2013, 1-8.
[208] RHODES 1973, 88-94.

dipping. To glaze the inner surface glaze can be easily poured into the vessel, left there for a moment, and then quickly poured back into the glaze bucket. Any excess glaze can be flicked off using a sharp rotation of the wrist while keeping the pot's rim parallel to the floor, it can be wiped off with a soft material, or it can be left as it is, for its decorative effect.[209] Glazes can also be poured over the outside surfaces of a pottery. This is often done to apply a thinner coat of glaze over the top of a base layer of glaze. The two glazes will interact, at least to some degree, often resulting in a more interesting coating with greater visual depth.[210]

3. **Brushing glaze on:** Many ready-to-use glazes are formulated to work well when applied with a brush. These glazes tend to be much thicker in consistency than dipping and pouring glazes. Some are a little less fluid than heavy cream, while others are so thick as to be pudding-like[211]. (Graph 45)



Graph.45: Decoration typology

Decoration	**%**
Incised	27
Applied	13
Impressed	5
Grooved	13
Molded	5

[209] RICE 1987, 98-101.
[210] PAINE – YOUNG 1953, 2.
[211] RYE 1981, 44.

Glazed	6
Punctured and robed	3
Painted	21
Bitumen	7

Table.18: Percentage distribution of decoration types

7.6. Firing procedures

7.6.1. Kilns

Kilns are constructed buildings with a semi trench or semi rectangular shape and consist of a firebox and a chamber.[212] They were developed in Mesopotamia and used for firing many different objects. When the kilns are excavated, the remains of slag are found around or in the fireboxes and notably less or indeed absent completely in the chamber. In general, three types of kilns are recognized: pit kilns, updraft kilns and down draft kilns.[213]

The earliest kiln ever found was excavated at Yarim Tepe on level I and X, with double chambers above floor level, and a combustion chamber dug into the ground. Later in the Samara culture, the kiln had an oval shape and it consisted of only an up-draught chamber, such as a kiln discovered in Tell es-Sawwn in level IIIb. The upper part had a round or rectangular shape and a single, arched chamber. During the Ubaid period at Tepe Gewra, in level XVI, the form of the combustion chamber was round and included a baking part. The wall of the kiln was built from mud-bricks.[214] In Mesopotamia the kilns had a different form which developed during the changes of time.

In general, the kiln composed of two chambers; the up-draught chamber and the combustion chamber. The up-draught was used to fire the pottery and the combustion chamber was used to fuel the fire and control the heat. The separation layer between the two chambers was punched through to allow the flames to reach the vessels, and let the oxygen enter the kiln.[215] The sizes of the kiln are in general around 1,5-2,3 x 1-2 m, but it can be observed that their sizes increased with time due to the intensity of the production.

[212] NELSON 1984, 21
[213] RICE 1987, 158-159
[214] STREILY 2000, 69-70
[215] AKKERMANS – DUISTERMAAT, 2001, 13

The construction of the kiln started with the digging of the pit in the ground and the walls of the pit were fastened with mud-bricks, and the bottom of the firing chamber was built of plastered clay which punched holes for the flames to pass through. There was one big hole in the centre of the roof of the kiln, but in some cases many holes were used.[216]

The combustion chamber had two semi-circular entrances: one in the front and the second on the side. The first was used to put the fuel material inside and the other served for cleaning the chamber from the ashes of the used fuel.

The size of the kiln, as mentioned before, changed through the times based on the necessity and the quantity of production.[217] For the Middle and Neo-Assyrian periods the necessity increased with the population and requires a bigger kiln. The size of the vessels also decided the amount that could be at the same time, for example due to size more bowls could be fired for once than jars.[218] The controlling of the fire of the kiln also required experienced people to set the temperature of the fire, and prevent damages such as cracks and crumbling.[219]

At Kilik Mishik only one kiln has been found in the north-western corner of the trench K.7, on level I, in a big courtyard.[220] The remains of this kiln were disturbed and in a bad condition, and only the combustion chamber was preserved with no information about the up-draught chamber. During the excavations a thick layer of ash was observed in the chamber with a considerable amount of slag near the kiln.[221]

According to the form of the kiln, and the ceramics inside it, it could be dated to the Middle Assyrian period, which was confirmed also by the similarities with the kiln found at tell Sabi Abyad on level 6.[222]

There are three firing conditions according to the atmosphere established in the kiln:

Oxidizing conditions

[216] AKKERMANS – DUISTERMAAT, 2001, 13
[217] RICE 1987, 159
[218] AKKERMANS – DUISTERMAAT, 2001, 14
[219] RICE 1987, 158
[220] IBRAHIM 2011, 2
[221] RHODES 1968, 123
[222] DUISTERMATT 2008, 352

The oxygen is allowed to enter into the kiln. The clay reacts with the excess oxygen and allows the surface to develop hues of red or yellow. Most of the ceramics from both sites are either red or yellow.[223]

Semi-oxidizing conditions

The pottery is fired with incomplete oxidation and carbon interacts with the vessel and cause the core to turn grey or black. The margins of the core will turn red, pale yellow or other colours.[224]

Reducing conditions

In the kiln, the oxygen is absent and the pottery does not have immediate contact with the flames. Therefore, it turns either black or grey. This process is subdivided into different types: firstly, the pottery without organic material, when their surfaces turn to black and the core turn reddish. The second type is the ceramics with organic material in them, when the surface is less dark than the core. The surface may become black and the core is grey.[225]

7.6.2. The fuel materials

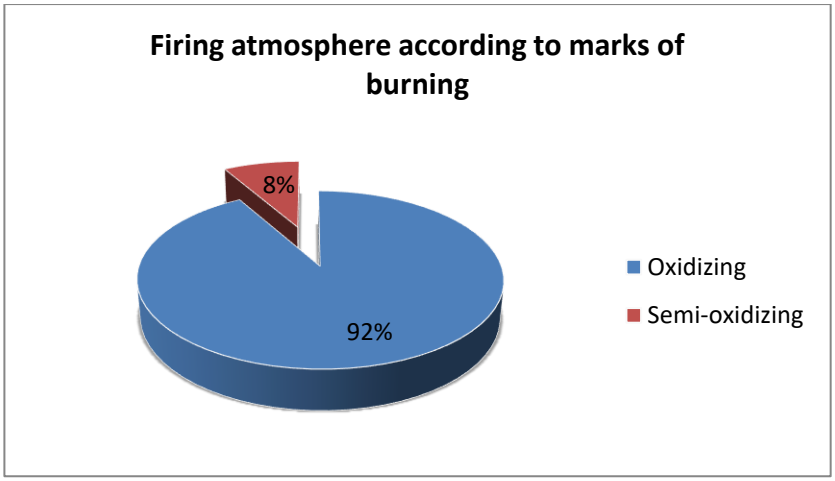
After the formation and complete drying of the vessels, they should be put into the kiln. About the form of the kiln, unfortunately, there are not much information accessible, for only one kiln was found at Kilik Mishik. In this case the excavators could make some observations in connection with the fuel material from the ashes left in the kiln: they used dung, agricultural refuse and charcoal.[226]

7.6.3. Firing atmosphere

Oxidizing and semi-oxidizing:

As mentioned in Chapter 4, the marks of burning for both periods have been separately analysed, but in this material both archaeological sites together have yielded new results about the burn marks visible on the vessels. 92% of all the sherds were fired on both sides in an oxidising atmosphere and 8% were fired in a semi-oxidizing atmosphere.[227] (Graph.46)

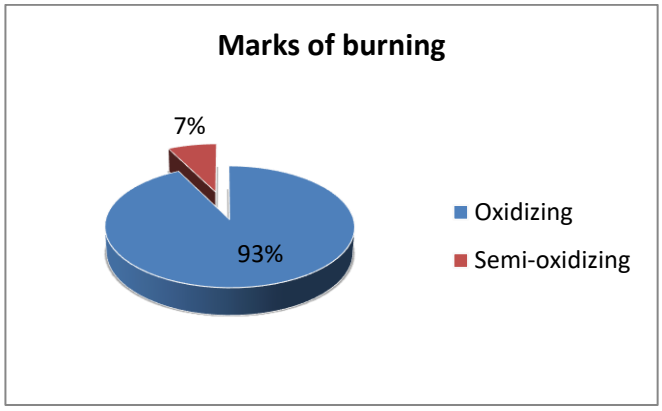
[223] RYE 1981, 29
[224] RYE 1981, 115
[225] KINGERY – BOWEN – UHLMANN 1976, 265.
[226] RYE 1981, 104.
[227] RYE 1981, 24.



Graph.46: Firing atmosphere according to marks of burning

The effects of the firing atmosphere depend on the mineral composition. For example, traces of iron produce an orange, red or brown colour in an oxidizing atmosphere at a normal level of temperature, whilst reducing the atmosphere at a high temperature will cause the iron to produce a grey or black tone.[228]

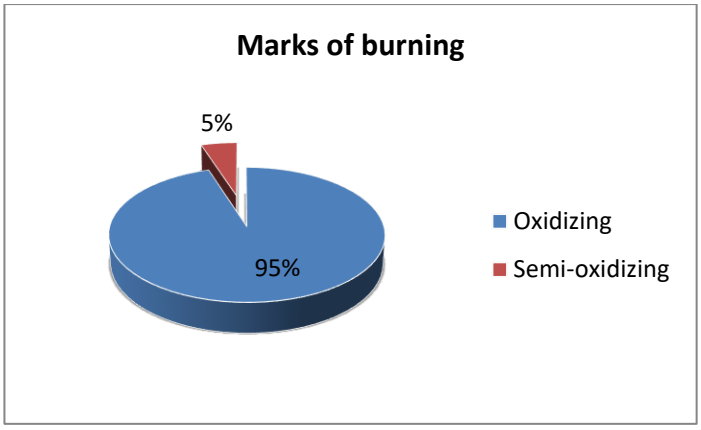
The firing of the Middle Assyrian pottery was exclusively oxidizing, no marks of reduced atmosphere were observed on any sherds from neither site.[229] (graph.47)



Graph.47, Marks of burning

The majority of the Neo-Assyrian diagnostics were fired in an oxidizing atmosphere, about 95%, mainly the fine and medium wares. The semi-oxidizing atmosphere is rarely presented, only with about 5% and the reducing atmosphere was not used at all. (Graph.48)

[228] HESS – PERLMAN 1974, 137.
[229] RICE 1987, 152.



Graph.48, Marks of burning

Connection between firing and colour

It can be observed on the interior and the exterior surfaces of the sherds, that the vessel usually changes its core and surface colour due to the firing. Various colours from the Kilik Mishik and Sheikhi Choli tomb have been recognized, such as: red, black, grey, green, white and buff[230].

In fact, the clay that was used is the same as the one to be found on other sites on the Erbil Plain, which suggests that the firing temperature had the same impact on the vessels. In this case the study on the effects of firing visible on the pottery of the region may be used on the sherds from this material as well.

The temperature levels that can be described are for example the following:

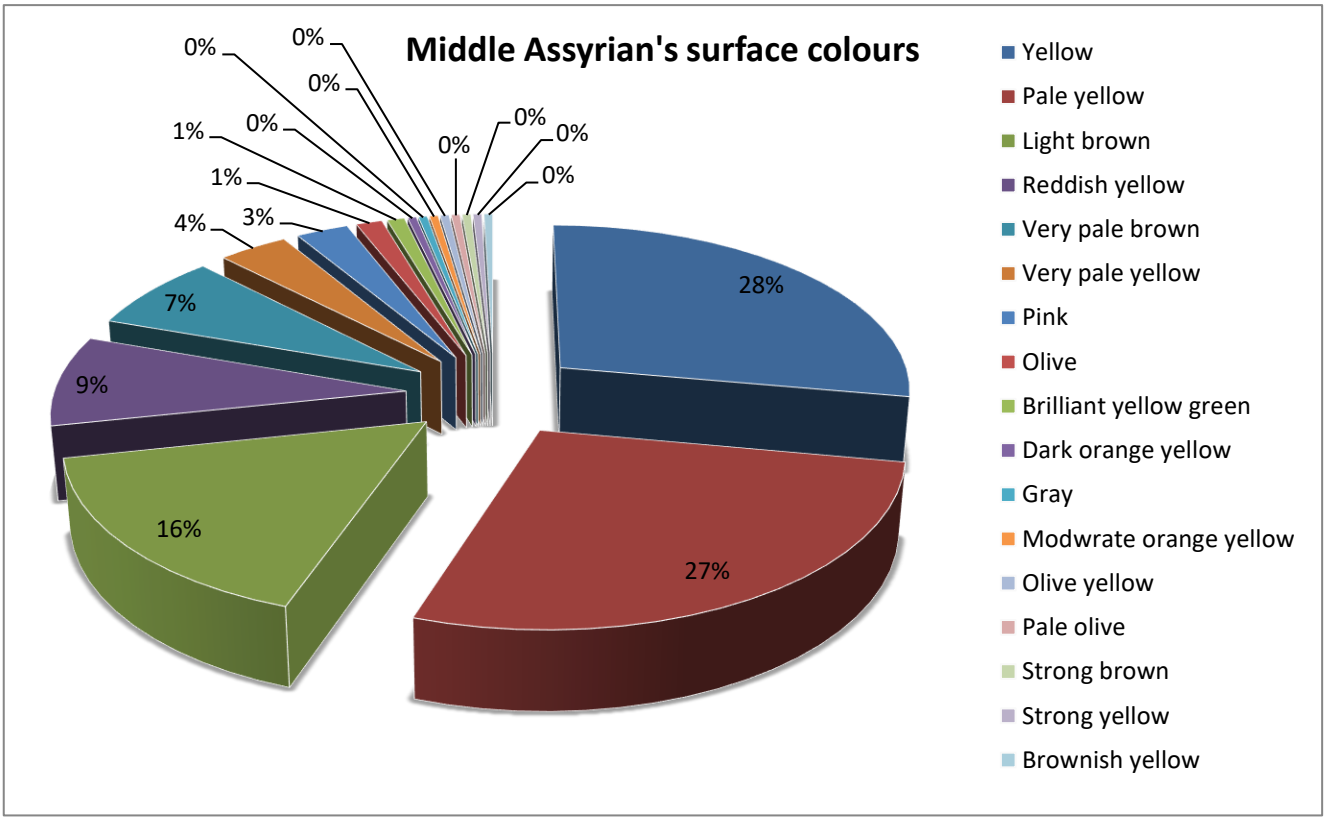
1. Brownish and reddish sherds: 600-700°C, low temperature (Fig. 35a)
2. Orange and buff sherds: 700-850°C, medium temperature (Fig. 35b)
3. Yellowish sherds: 850-1000°C, high temperature[231] (Fig. 35c)

[230] RICE 1987, 344
[231] WARASHINA – HIGASHIMURA – Y. MAEDA 1981, 117.

C

Fig. 35a, b and c, Connection between firing and colour

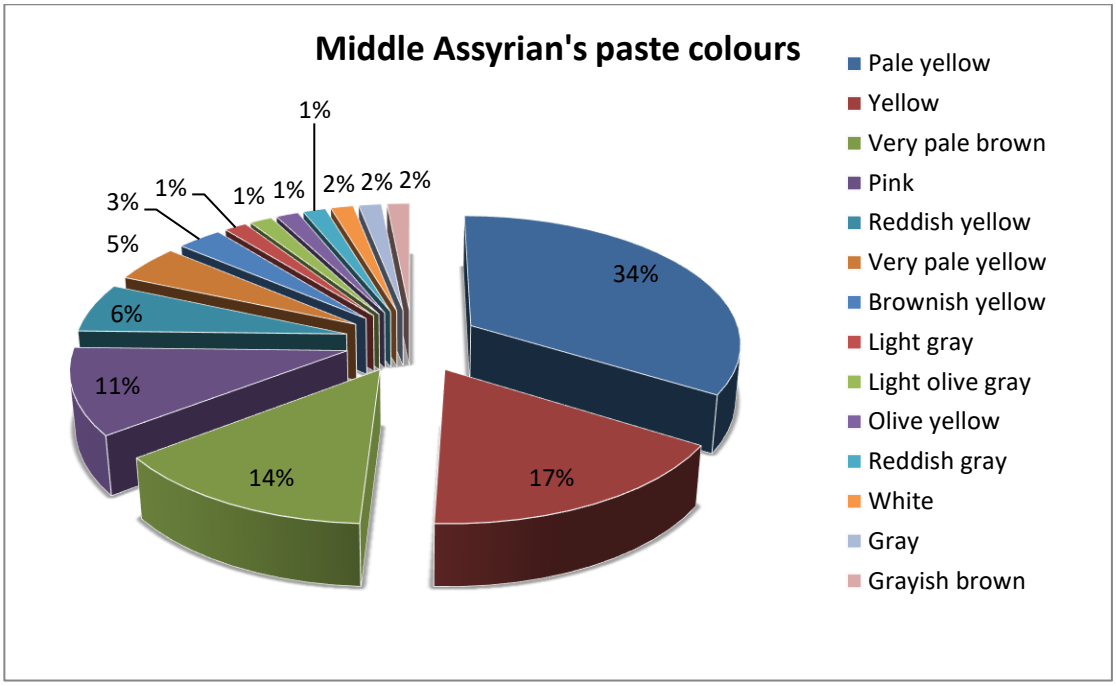
Regarding the surface colour of the paste. the most frequent type was a yellow or pale yellow which gave 28% and 27% of the whole material. The least common colours are dark orange yellow, grey, moderate orange yellow, olive yellow, pale olive, strong brown, strong yellow and brownish yellow.[232] (Graph.49)



Graph.49, Middle Assyrian's surface colours

[232] RICE 1987, 80-110, 339.

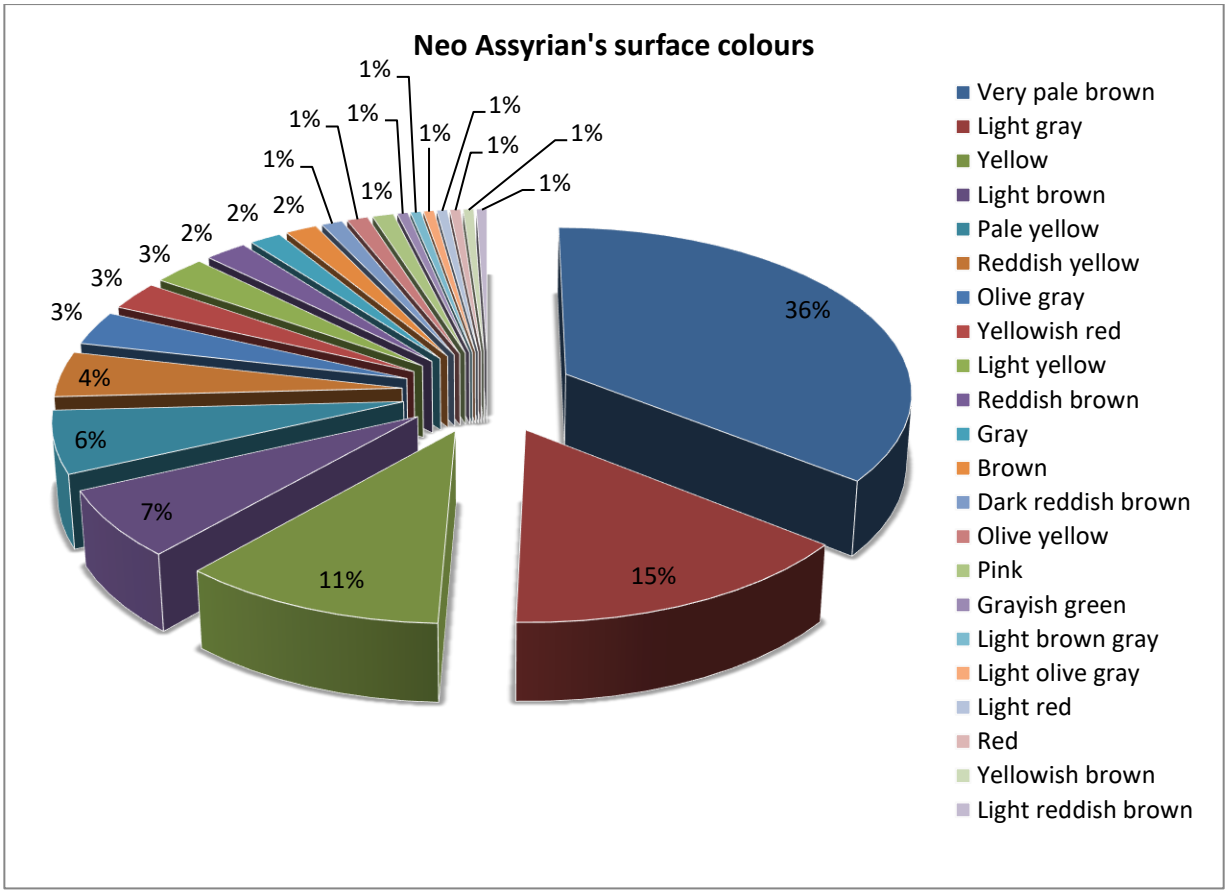
The colour of core of the sherds indicate the firing temperature and the atmosphere of the kiln.[233] Various colour were presented on the Middle Assyrian ceramics. The main group was pale yellow, with 34% of all the sherds from the period. 17% was yellow and 14% very pale yellow. All of these colours were results of an oxidizing atmosphere. Other colours appeared during an incomplete-oxidizing, such as light grey (1%), light olive grey (1%), grey (2%) and greyish brown (2%). No sherds from the material had traits of reducing environment.[234] (Graph.50)



Graph.50, Middle Assyrian's paste colours

The oxidizing firing of the Neo-Assyrian period can be visible on the sherds with pale brown (36%), light grey (15%) and yellow (11%) surface colour. The colours of the semi-oxidizing technique were the olive grey (3%), grey (2%) and greyish green (1%).[235] (Graph.51)

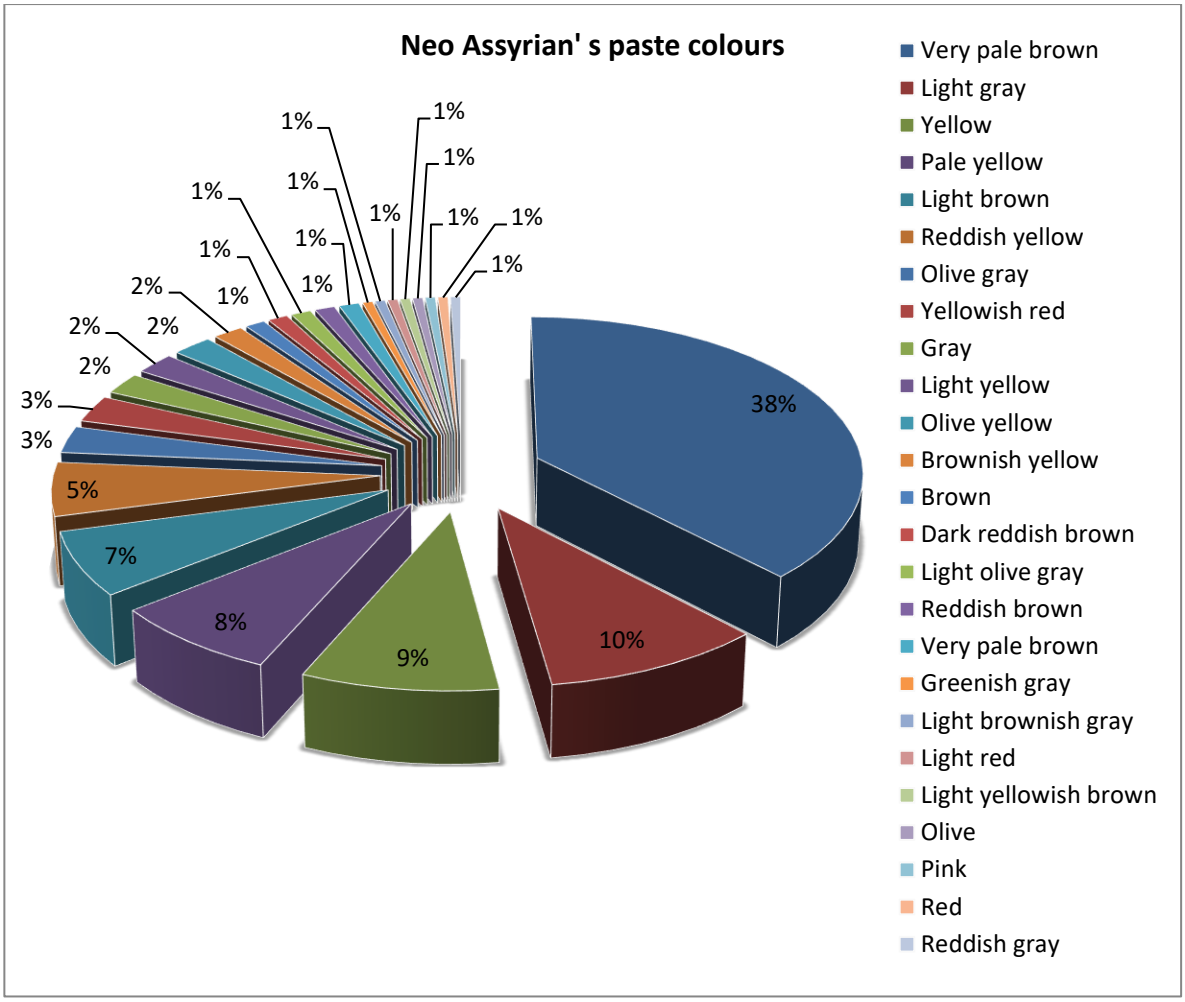
[233] BONIS – GULTRONE – GIRFA – LANGELLA – LEONE-MERCURIO- MORRA 2017, 8066-8074.
[234] RICE, 1987, 331-345
[235] RICE 1987, 80-110, 339.



Graph.51, Neo Assyrian's surface colours

Regarding the core colours, oxidizing atmosphere could be identified in case of the pale brown (38%), light grey (10%), yellow (9%), pale yellow (8%), light brown (7%), and reddish-brown paste. Non-complete oxidizing was also visible on the sherds with grey (2%), dark reddish-brown (1%), greenish grey (2%) and reddish-grey (1%) colour.[236] (Graph.52)

[236] RICE 1987, 80-110, 339-345



Graph.53, Neo Assyrian's paste colours

General atmospheres

The circumstances of firing, mainly the atmosphere have a great impact on and influence the colour of the final product. In general, some of the colours are created only based on the atmosphere of firing. Oxidizing circumstance creates a reddish or greenish hue, while incomplete oxidizing causes a dark-grey or black core colour, and the reducing atmosphere gives the pottery a grey, dark-grey or black inner and outer surface and a dark core.[237]

7.6.4. Temperature and duration of firing

The circumstances which affect the end result during the firing process includes the duration of firing, the temperature and the atmosphere of the kiln such in

[237] RICE 1987, 343

terms of the oxygen content. All of the processes influence the colour, hardness, porosity and permeability of the vessels.[238]

In general, the ceramics from Kilik Mishik and Sheikhi Choli vaulted tomb were fired on three main temperature levels which can be estimated based on the colour of the pottery.[239] (Table 19)

The temperature of firing was specified by the colour they wanted to reach, and the colour itself depended mainly on the firing process. The three levels created different colours both on the surface and in the core of the pottery. This colour dispersion was already discussed above, but the main firing temperature levels at the examined sites are the following:

High	ca. 850-1000 °C
Medium	ca. 700-8500 °C
Low	ca. 600-700 °C

Table 19: The main levels of firing

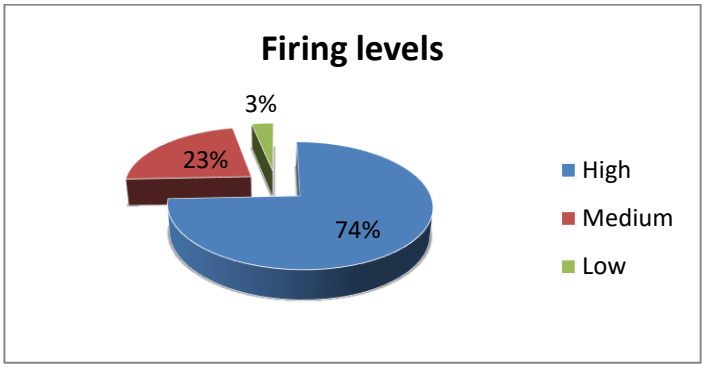
On the other hand, the morphological shapes may also be classified into groups according to the three levels of firing temperature and their percentages in the material. The results of this study are shown on Table.20 below:

	High Temperature	Medium Temperature	Low Temperature	Total
Bowls	87%	12%	1%	100%
Jars	88%	10%	2%	100%
Pots	61%	28%	11%	100%
Cups	100%	0%	0%	100%
Goblets	91%	9%	0%	100%
Pot-stands	64%	18%	18%	100%
Basins	0%	100%	0%	100%
Strainers	100%	0%	0%	100%
Plates	50%	50%	0%	100%

Table.20: The percentage distribution of the firing temperature

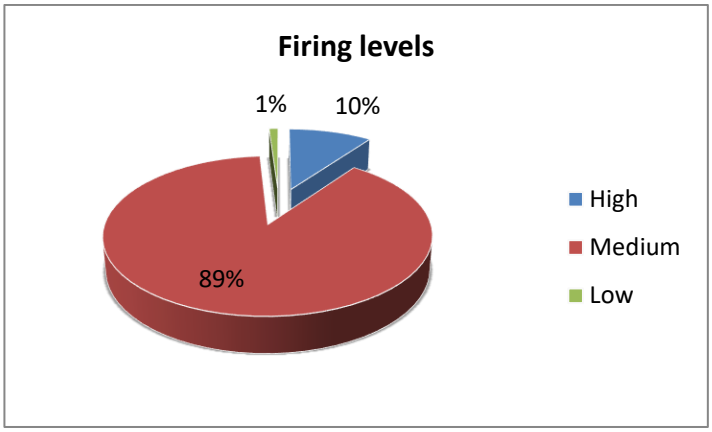
[238] TITE 1969, 132.
[239] RICE 1987, 426-427.

The levels of firing in the Middle Assyrian empire had three main types: the overcooking on a high temperature in a kiln (74%), medium temperature, with less impressive results (23%) and the undercooking with the worst quality (3%).[240] (Graph.54)



Graph 54, Middle Assyrian Firing levels

During the Neo-Assyrian times 10% of the sherds, 19 pieces was overcooked, while 89% was fired at medium temperature, about 171 sherds. Only 1-2% of the material was undercooked.[241] (Graph.55)



Graph.55, Neo-Assyrian firing levels

[240] RICE 1987, 90.
[241] RICE 1987, 90.

7.7. Spoiled vessels

7.7.1. Deformed vessel

At the Sheikhi Choli vaulted Tomb many deformed vessels could be notified and studied. It is mostly visible in the case of the bowls and jars. The deformation happens usually before the vessels are completely dry[242]. The damage mainly affects the rim, the wall or the base, and sometimes the sides of the vessel are of different heights.[243] The bases often lose their flattened surface due to the irregular work of the potter.[244] (Fig.36 a and b) The fact that deformed vessels were presented in the material suggest, that pottery production was carried out on the site.[245]

Fig. 36 a, after Pshtiwan, fig.25

Fig.36 b, after Pshtiwan, fig.102

Fig.36. Deformation

7.7.2 Voids

There are six types of voids: from the joining points of the coils, from kneading, additive temper, pores, mineral voids on the surface and organic voids on the surface.

The voids from the coiling appear at the joining points of the coils themselves. These are partly vertical lines and are not parallel with the walls of the vessel.[246] (Fig.37d)

If some air bubbles stay in the clay during the kneading, that also creates voids in the fabric of the pottery. The orientation of these is parallel with the wall of the vessel. The form of the voids varies and depends on the amount of air present, and the size of the coils.[247] (Fig.37c).

[242] PFALZNER 1995, 244.
[243] ROBERTS 1963, 21.
[244] DUISTERMAAT 2007, 400.
[254] DUISTERMAAT 2007, 417.

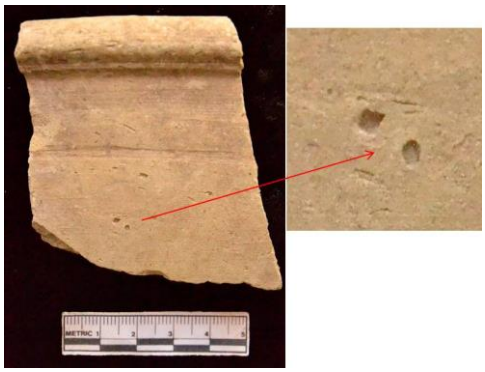
[246] RICE 1987, 121.
[247] RYE 1981, 21, 38-39.

The additive temper is another factor that causes shrinkage when the vessels dry. These appear when the water was lost during the firing process. After drying, small fractures appeared on the body causing structural weaknesses.[248] The form of the cracks was usually rough-sided with grain temper on one side. (Plate 11, Fig. 1741)

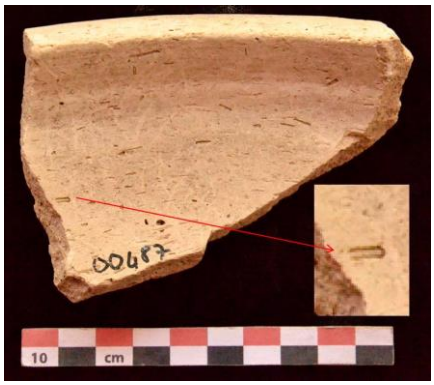
The pores are totally different voids because it can only be observed through microscopy, and are the spaces between the solid particles of the clay.[249]

The voids caused by mineral tempering occur when the interior and exterior surfaces of the vessel are treated, and leave some small, compact, smoothed sided voids on the walls of the pottery. (Fig 37 a)

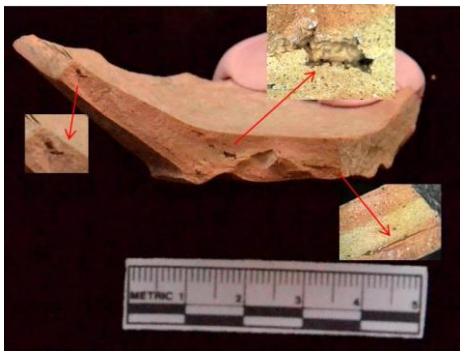
The last type to be discussed is organic voids. These appear on the surface as well, in the cases when organic temper is used, and due to surface treatment it leaves small and bigger rectangular shaped voids. In some cases, the organic temper is still visible in these holes.[250] (Fig.37b)



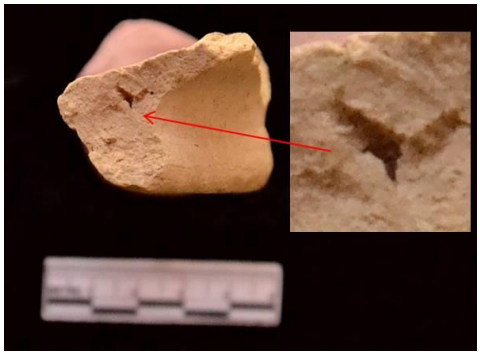
A, fig.00592



B, fIg. 00487



C, fig 00041



D, fig 00609

Fig.37, voids, A- voids from mineral temper. B- Voids from organic temper. C- Voids from plasticity. D- Voids from join coils.

[248] MISSERONI 2016, 1.
[249] RICE 1987, 74.
[250] HILL 1984, 2-6

7.7.3. Minor damages from firing, drying and shaping

Minor damages appeared during the pre-firing, drying and shaping stages of the vessel production.

Cracks

In general, two types of cracks exist in pottery production: the drying cracks and the firing cracks. The drying cracks tend to be irregular and rough edged, and widened with time. The firing cracks are regular, sharp edged and smoothed faced (wall crack, Fig.38d,). The drying cracks usually occur on the base or when two coils or pieces are joined.[251]

In general, three sub-categories of cracks have been observed on the vessels used in this research: the cracks on the rim which run to the base, the cracks in shape Y and shape S. These occurred mostly on the inside of the vessels during the drying process because the air couldn't reach every part of the interior. Most of cracks occur on the inside bases because the potter couldn't press the material perfectly and the air couldn't reach it well enough.[252]

Sometimes the size of cracks would become bigger during the firing process, most notably on the bases which were flat from the cutting from the cone.[253]

We often find that cracks appear on the walls of the jars when the bases are thicker than the upper part. On the other hand, the cracks appear on the rim and the wall when vessels get cooled and heated fast after the shaping.[254] (Fig. 38 a, b, c, d, e, f and g)

Spalling

Spalling is the term used to describe when ceramics explode during the firing process. It occurs when the drying process is not complete [255]. The water that remains in the clay expands, turns to gas and causes the ceramic to explode, or spall. If one vessel fails this way it often causes the entire batch fired at the same time to fail. Only a few sherds which display evidence of spalling were found at either site.[256] (Fig.39 a, b, c and d)

[251] WEST – FORD 1976, 511.
[252] HAMER 1975, 77-85.
[253] TITE 1999, 184.
[254] RYE 1981, 51, 61.
[255] RYE 1981, 105.
[256] KINGERY 1955, 3.

Spalling	Lime spalling
 Fig. 38a, after Pshtiwan , fig.143	 Fig.38c, after Pshtiwan , fig.52
 Fig. 38b, after Pshtiwan , fig.52	 Fig. 38d, after Pshtiwan , fig.55

Fig.38: Spalling

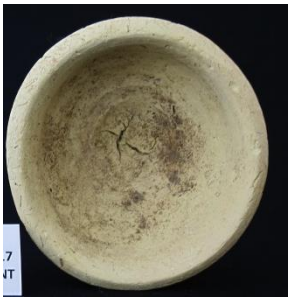
S cracks	Y cracks	C cracks	Cross cracks
 Fig.39,a, after Pshtiwan , fig.35	 Fig.39b, after Pshtiwan , fig.89	 Fig.39e, after Pshtiwan , fig.159	Bowl  Fig.39f, after Pshtiwan , fig.85
	Doble cracka of Y  Fig.39c after Pshtiwan , fig.102		Small jar  Fig.39g, after Pshtiwan, fig.150
	Small jar  Fig.39d, after Pshtiwan, fig.146		

Fig 39: Cracks

Crumbling

When a vessel is fired at a high temperature and the fabric has turned into a greenish colour and appears to become crumbly in texture, the surface of both sides of the vessel may crumble. Again, not many examples of crumbing vessels have been found in the examined material.[257] (fig.40)

Fig.40: Crumbling after Abdullah, 618

Damages before fringing

Many complete vessels from the Sheikhi Choli Tomb indicate the damage or production-mistakes of the potter that occurred before the firing. One example, a bowl (Fig.41 a) shows a hole on the outside surface. Sometimes the potters fingerprints are also visible on the surface due to unintentional touching, as it is the case with the small jar.[258] (Fig.41b)

Fig.41a (Photo: A. Pshtiwan, Fig.20)

Fig.41b, (Photo: A. Pshtiwan, Fig.150)

Fig.41. Damages before fringing

7.7.4. Repair of the vessels

At both Kilik Mishik and the Sheikhi Choli vaulted tomb, it was observed that many vessels were repaired by filling the cracks or damaged areas in bitumen.

[257] RICE 1987, 104, 355, 421.
[258] RYE 1981, 111.

Reparations of damages which occurred after drying, or the broken vessels, for example broken rims or bases were made by the use of bitumen.[259] (Fig, 42 a, b and c)

Fig.42a, after Pshtiwan, fig.23

Fig.42b, after Pshtiwan, fig.29

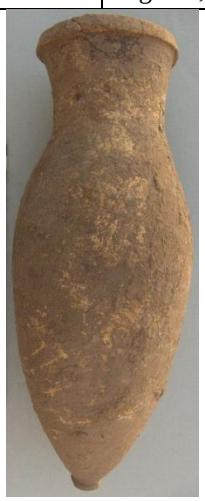


Fig.42 c, after Pshtiwan, fig.114

Fig 42: repair the vessels

7.8. Signs and marks

Signs and marks appeared on Mesopotamian pottery first in the prehistoric period.[260] These features were added to the finished pottery either before drying or firing process, usually with a sharp and hard pointed tool. Marked vessels appear at both sites and consist of a single sign and random lines. Until now, no relationship has been observed between the vessels and these marks. The potters marked their vessels by incised signs to identify their individual products. They usually marked the outside surface and the outside of the vessels in the area below the shoulder. Previous studies on the marks appearing on Northern-Mesopotamian ceramics have been conducted by Kolinsiki[261] and Holand T[262], furthermore, similar studies have been made by Daniel,

[259] DUISTERMAAT 2007, 400.
[260] KOLINSIKI 1993-94, 5.
[261] KOLINSIKI 1993-94, 6.
[262] HOLAND 2011, 294.

Seidi[263] and Museyibi [264] focusing on those that appear on Iranian and Anatolian pieces.

Only twelve marks and signs have been recognized on the vessels from either of the studied sites. The main motifs that are identifiable are: lines of different characteristics, cross, eye and semi-cross, etc. (Fig.43i) All marks have been classified into four groups: the incised, the impressed, and the other, as it is presented below:

a. **Incised:** The incised marks were applied with a blunt object prior to the hardening of the clay. Various shapes appear, such as the horizontal, short vertical, oblique, interrupted, random, and wavy lines. (Fig.43 a, b, c, d, e, and f)
b. **Impressed**: Only a few examples of impressed markings have been recognized. It seems to be created before the firing. (Fig.43g)

Incised	Impressed	Holed	Others
horizontal  Fig. 43 a, after Pshtiwan, fig.24	 Fig. 43g,.after Pshtiwan , fig.117	 Fig. 43 h, after Ibrahim, Fig.11	 Fig. 43i, after Pshtiwan, fig.21
Interputted  Fig. 43 b after Pshtiwan, fig.31			

[263] POTTS 1981, 108.
[264] MUSEYIBI 2016, 291, 283-294.

Oblique lines  Fig. 43 c after Pshtiwan, fig.102			
Short vertical lines  Fig. 43 d, after Pshtiwan, fig.125			
 Fig. 43 e, after Pshtiwan, fig.142			
Semi cross  Fig. 43 f, after Pshtiwan, fig.117			

Fig.43, the signs and marks

7.9 Ware groups

Ten pottery wares have been separated relating to the forming, shaping and the production processes of the ceramics.[265] Each technique has an explanation of its inclusion percentages, formation technique, surface treatment and firing in comparison to the morphological characteristics, and the main form groups they usually are used for (Table 21 and Graph 42).[266]

Technic pottery	Forming	Shaping	Fabric	Description	morphology
Ware 1	Coiling, hand made	Smoothing	A1	15-50 % big and small sub-angular and rounded gray and white inclusions, 2 % organic temper, 1% grog.	Basins, big jars
Ware 2	Coiling	Smoothing	A2	10 % of rectangular vegetal temper, 1-10% small and sub-angular gray and white inclusions	Bowls, plates, jars, pot stand
Ware 3	Coiling, slow wheel	Smoothing	A3	3-20% organic temper, 1to 5% rounded and sub-angular white and gray inclusions with 2% grogs.	Bowls and small jars
Ware 4	Coiling, slow wheel	Burnishing	B	25 % sub-angular white and grey inclusions, 1% organic temper	cooking pots
Ware 5	Coiling, slow wheel	Burnishing	C	10-50 % big sub-angular gray and white inclusions with 1 % sub-angular black inclusion and 1% organic temper	Pots
Ware 6	Coiling, slow wheel	Burnishing	D	10% big and small mineral sub-angular white inclusions, 1% organic temper	bowls
Ware 7	Coiling, fast wheel	Smoothing	E	1% sub-angular white inclusion, 1% organic temper, palace ware.	Goblets and small jars
Ware 8	Slow wheel	Smoothed	F	1% small sub-angular white inclusion, 1% organic temper	Plates and bowls
Ware 9	Fast wheel	Smoothing	G	1-5 % small and big rounded grey and white inclusion, 1-7 % organic temper	Jars, strainer and bowls
Ware 10	Slow wheel	Smoothing	H	1-5 % organic temper, 1-5% small white and grey sub-angular inclusion fine ware	Tripod and medium jars and bowls

Table 21. Characteristics of the different ware groups

Ware 1

This ware is formed of coils and its handmade. It is made out of fabric group A1, which is characterised by 15-50 % of big and small sub-angular, rounded grey and white inclusions, 2 % of organic temper and 1% of grog. The surface was smoothed well. It was fired in a semi-oxidizing atmosphere on a low temperature, between 600 and 700 °C. The wall is usually quite thick, between 1,5 and 2 cm. This ware type was usually used by the making of basins and big storage jars. (Graph.56)

[265] OUDEMANS – ERHARDT 1996, 137-142.
[266] RICE 1987, 80-110.

Ware 2

The fabric group A2 was used for this ware, which is characterised by 10 % of rectangular vegetal temper and 1-10% of small and sub-angular grey and white inclusions. It was used to usually formed from coils, and the surface was smoothed well. They were fired on low temperature, between 600 and 700 °C in a semi-oxidizing atmosphere. The walls of the vessel are rather thick between 1 and 3 cm. This type of ware was used for the production of bowls, plates, jars, pot stands. (Graph.56)

Ware 3

The fabric of this ware is A3, which is characterised by 3-20% of organic temper, 1-5% of rounded and sub-angular white and grey inclusions with 2% grog. It was primary formed from coils or on a slow wheel, with a well smoothed surface. The firing happened on medium temper with 700 to 850 °C, and in a semi-oxidizing atmosphere. The thickness of the wall is between 1 and 2 cm. Bowls and small jars were mainly created from this material**.** (Graph.56)

Ware 4

The forth technical group had the fabric B, which contains 25% of sub-angular white and grey inclusions and 1% of organic temper, was formed with coiling or on a slow wheel, with burnished surface and even inside on some occasions, and the wall of the vessel is uneven, usually between 0,8 and 2 cm, with a thicker upper part and a thinner lower due to firing purposes. It was fired on medium temperature, between 700-850 °C in oxidizing atmosphere. It was used for producing cooking pots. (Graph.56)

Ware 5

The fabric group C is the core material of ware 5, with 10-50% of big sub-angular grey and white inclusions, 1% of sub-angular black inclusion and 1% of organic temper. It is formed by coiling or on a slow wheel. The surface is well burnished. The -vessels were fired on medium temperature (700-850 °C) in an oxidizing atmosphere. The thickness of the wall is usually 1 to 2 cm. It was mainly used for pots. (Graph.56)

Ware 6

The fabric group D belonged to ware 6, which means it contained 10% of big, small and sub-angular white inclusions with 1% of organic temper. Vessels from this ware were crafted from coils, or on a slow wheel. They were fired medium temperature (700-850 °C) in reducing environment, and were well burnished surfaces. The wall

thickness is between 0,5 and 2 cm. Main morphological groups created form this ware type are bowls. (Graph.56)

Ware 7

Ware 7 is characterized by the fabric group E (1% of sub-angular and white inclusion and 1% of organic temper), the vessel formation by coiling and with slow wheel, the well smoothed surfaces, and firing on high temperature (850-1000 °C) in oxidizing atmosphere. The wall thickness is between 0,3 and 1 cm, and it is classified as palace ware. The main forms presented are goblets and small jars. (Graph.56)

Ware 8

The ware, for which fabric group F (1% of sub-angular and white inclusion, 1% of organic temper was used for, was formed on a slow wheel and has a well smoothed surface. The firing happened on a high temperature (850-1000 °C) in an oxidising atmosphere. The thickness of the walls was between 0,5 to 1 cm. (Graph.56)

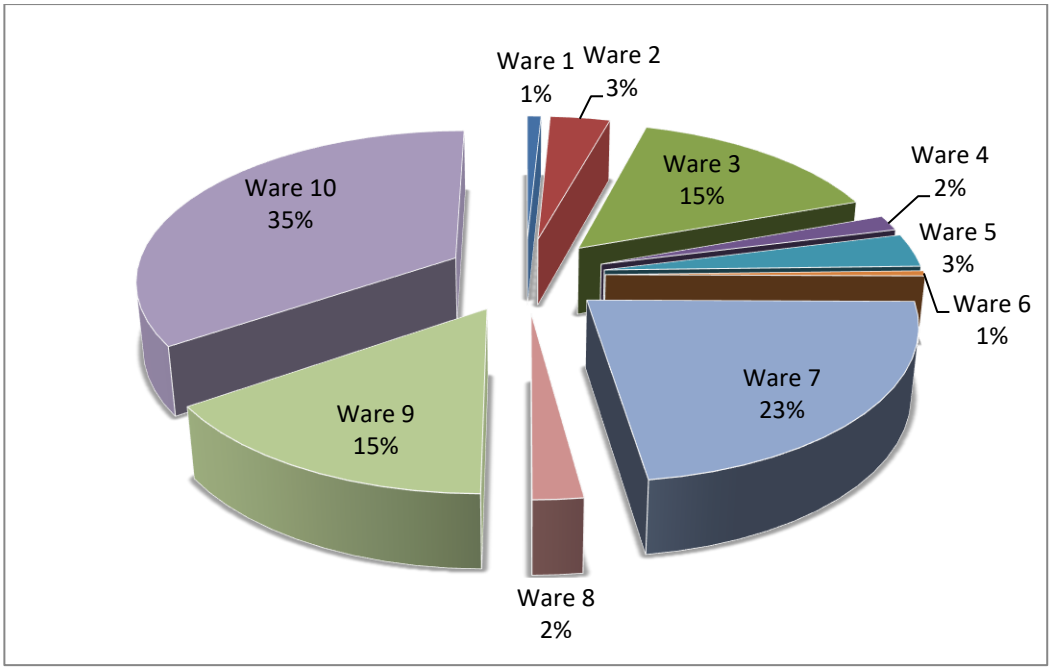
Ware 9

Made from the fabric G (1-5% of small and big rounded grey and white inclusion and 1-7% of organic temper), ware 9 was usually formed on a fast when to the morphological groups of jars, strainers and bowls. The surface itself was well smoothed. The vessels were fired in an oxidizing atmosphere between 850-1000 °C. The wall thickness reached only between 0,5 and 1 cm. (Graph.56)

Ware 10

Ware 10 was made from the fabric H, which is characterised by 1-5% of small and big rounded grey and white inclusion, 1-7% of organic temper, with a smoothed surface. It was fired on a high temperature, between 850 and 1000 °C, in an oxidizing atmosphere. The walls are 0, 5 to 1 cm thick, and were made to form the tripods and medium sized jars.

The most common ware is the ware 10 with presenting around 35% of all the sherds and the ware 7 with presenting around 23%. The non-common ware is the ware 1 with presenting and ware 6 only 2% from all the sherds. (Graph.56)



Graphs 56: wares groups percentage

7.10 General characteristics of the technology of Middle- and Neo-Assyrian pottery

It is important to see the characteristic of the Middle- and Neo-Assyrian periods clearly. The same technique was used in both periods for the creation of the pottery itself. Most of the Middle-Assyrian ceramics are fabricated on the wheel, but for the big vessels like jars, basins and tannurs, the slab-building method was used. The Neo-Assyrian ceramics have been fabricated with coil and thrown by the wheel.

The inclusions of the Middle-Assyrian ceramics have more mineral and organic temper. We see the same by the Neo-Assyrians but the size of the inclusion are smaller.

The colour of the clay also plays a prominent role: the Middle-Assyrian ceramics have a yellow or olive to yellowish colour, but the Neo-Assyrian have a rather orange to red shape.

The next step is the surface treatment which follows the shaping the vessels. For the Middle and Neo-Assyrian ceramics many methods were used such as the burnishing, smoothing, planning, slipping and scarping. The burnishing and the covering with slip is better associated with the Middle-Assyrian period according to the lack of glazing on the pieces.

The other point which classifies the pottery is the decoration, with several identifiable decoration methods and motifs. In general, the incising, applying, painting, costing with bitumen, impressing, grooving, moulding and glazing methods were used through both periods. Nevertheless, the incised and painted decoration was the most common. The main motifs were horizontal, waved lines incised, while the prominent painted shapes were bands and triangles, which had a brownish colour during the Middle-Assyrian period, but was changed to red and dark colour in the Neo-Assyrian times.

8. Function and use

Introduction

This chapter deals with the use of the ceramics during the Middle- and Neo-Assyrian periods. The study focuses on the function and examines the archaeological contexts and the physical characteristics as well as the traces of use. Firstly, the archaeological context of the finds requires an explanation, and their primary and secondary use. Secondly, the discussion of the characteristics of the vessels such as the fabrication, the vessels' form, general aspects, surface treatment, special features, evidence of use or trace of use and the decoration is necessary, because it determines the functional possibilities.

The morphological study is essential to examine the design of the form of the vessels and for which purpose they were manufactured. An analysis of the surface treatment and the evidence of use are also important to understand the general use of these vessels.

The main aim of the chapter is to connect the technological aspects of the pottery fabrication, and its effects to the morphology of the vessels. Moreover, it shows how the technical aspects determined the intended function, and how every step of the pottery production serves one main cause, the function.

8.1. Archaeological context and trace of use

At Kilik Mishik, many rooms of building have been discovered and it is possible to determine their use based on the vessels found. We focused on the archaeological context and remains of the contents such as the spatial analysis of the site. There are also clearly defined spaces for the preparation of food such as the 'Tannur' and a stove for cooking on the floor. All of these spaces indicate the function of the vessels found, such as the storage jars in a storage room containing the grains, seeds, and liquids.[267]

Remains of contents:

One possibility to examine the context is to focus on the remains of the vessels found, and study the traces of residue, such as wine, beer, oil, which gives a

[267] ROUAULT - MARIA, 2010. 10.

clear view of the function of the pottery.[268] (Fig. 44, A, B, and C) The remains of food and drinks, and various contained materials left stains of the inside and outside of the vessels, which gave them different coloured patches (brown and reddish). Most of the complete vessels from the Sheikhi Choli vaulted tomb were stained with fat, wine and some of them carried the bones of the animals, which suggest that they were used for burial food offerings. The crust counts as a residue on the inside as well. The section of the pieces carried remains of charred seeds or another residue but unfortunately, no observations of the charred seeds have been carried out yet.[269] The different types of residue suggest various functional categories in the material, such as offering vessels, food preparation and fermentation vessels, and storage jars. Furthermore, different characteristics are also visible which suggest specific function (for example jars with spouts and handles).

Fig.44 A, (Photo: A. Pshtiwan)

Fig.44 B, (Photo: A. Pshtiwan)

Fig.44 C, (Photo: A. Pshtiwan)

Fig.44. trace of residue

Ceramics in burials:

[268] Othman 2017, 219
[269] OGRINC ET AL. 2012, 345.

At burial sites two usages of ceramics is visible: the first is to contain the body, as it was in Kilik Mishik, where several vessels contained remains of children skeletons and gifts. (Fig.45.B). The second is the utilization of the vessels was usually offerings to the deceased, (Fig.45. A) Beside the skeletons offering bowls and jars and further goods such as beads, jewellery, earrings, bracelets and necklaces. These vessel types are known outside of burial contexts as well, but in this case, they got a secondary function and meaning.

Fig.45,A (Photo: A. Pshtiwan)

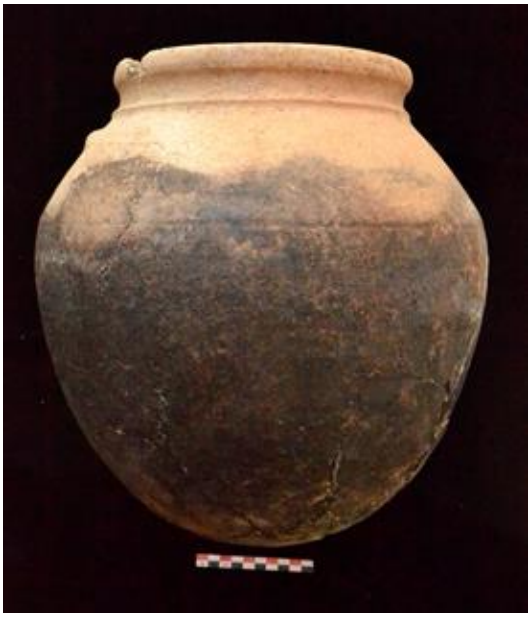


Fig.45.B (Photo: A. Pshtiwan)

Fig 45, Burial ceramics

Secondary use:

The broken vessels were often reused as pots, pot-stands, scraping tools for the ceramic production or parts of pavements. That said, so far, no observations for secondary use have been found at either site. In some cases, broken pottery was used for fixing damaged or broken vessels. The primary and secondary use of the sherds can be separated and distinguished quite easily according to the condition of the pieces (dirtiness, surface treatment, size, etc.).

8.2. Characteristics and trace of use

8.2.1. Fabric of the pottery and the function

This chapter discusses the permeability and porosity of the vessel determined by composition and manufacturing.[270]

The permeability refers to the amount of moisture soaking into the core of the pottery from the physical contact with liquids[271]. It means that if the vessels are tempered with more minerals, the result gives less porosity[272]. Meanwhile, on the other hand, the organic tempering gives high porosity. The question is consideration is how the potters produce the pottery pieces: what kind of inclusions the added? What percentage of the inclusion is originally part of the material and how much tempering was added? The potters at Kilik Mishik used additive minerals such as calcite and quartz,[273] and for the larger jars greater amount of additive inclusions were used, but some of these stones seem to be naturally part of the clay.[274]

The composition of the clay paste depends on two main aspects: formation and manufacturing.

Formation:

The topic of the formation, though it was already discussed in the previous chapter, helps the understanding of the connection between the material and the function what it served. First the potter had to create the clay with proper level of plasticity, for which different tempering materials were added, according to the main goal: the morphological form that was about to be created, and the final function of the vessel. The tempering also served practical purposes to make it easier to form and fire, and increase the resistance of the vessel. The mineral and organic temper affected the plasticity of the clay as well, and determined the form: for example, the big vessels probably needed more mineral temper to have a harder fabric, thus the organic temper gives more plasticity of the clay and absorbs the moisture.

Manufacturing:

This process was the fabrication of the vessel itself. The different form types required different amount of time and effort to create. Furthermore, the nature and the intensity of tempering has a great effect on the difficulty of manufacturing as well.

The relation between inclusion and **techno-functional groups** determine the function and usage of the vessels. The type, size, shape and quantity of the temper

[270] WASHBURN 1921, 966.
[271] PLANT 1970, 19.
[272] HENRICKSON - MCDONALD 1983, 633.
[273] RICE 1987, 80-110.
[274] ABBINK 1999, 109.

gives the potter several ways to manufacture the vessels. This study discusses ten techniques which determine the fabrication based on the inclusions.

8.2.2. Performance characteristics and firing temperature

The firing temperature influences most of the main characteristics of the pottery and can be described from different perspectives:

Thickness of the vessel wall

The walls of the vessels play an important role in studying the thickness and coarseness of the vessels. The thickness depends primary on the size of the vessels. There are some examples of bigger vessels having thinner walls (such as medium jars), but most of the time the formation of the vessel and its function and size had to serve the same purpose.[275] Furthermore, the question of even and uneven walls should be also taken under consideration. It was a usual practice to create vessels with thicker upper, and thinner lower parts, which made it suitable to support handles or lugs which allows easy carrying of the contents from the reinforced section. In the case of pots, it also helped for the contents to heat faster. In the case of pots the thicker walls caused disadvantages because contents heated more quickly. On the other hand, some types of vessels, for example storage jars functioned the best with thick walls, for making them more resistant and less porous.[276]

Resistance of the vessel wall

The wall shows all of its characteristics depending on the presence of the inclusions, the permeability, porosity, and density.[277] All the related properties to the vessels are based on the composition and formation of the wall.[278] The permeability is one of the main traits of the vessel, for it deeply defines the function of the pottery.[279] For this several techniques were used and great efforts were made to make the vessels more resistant to liquids. Such techniques are coating with bitumen, burnishing, glazing and using slip.[280]

The porosity is indicated by the presence of pores or spaces in the walls. The density is the weight of an object per unit volume, which depends on the inclusion or

[275] BRODY 1979, 11.
[276] RICE 1987, 227
[277] COBLE - KINGERY 1955, 33.
[278] MANSON – SMITH 1955, 18.
[279] REEDY - ANDERSON - REEDY 2014, 1-17.
[280] ANDERSSON 2011, 3.

the paste material of the wall.[281] These could be influenced by the temperature of firing and the tempering of the material.[282]

Thermal stress

The relationship between the firing and the contents of the fabric itself during the firing process determines the tempering of each ware group according to the idea of the product to be created.[283] As Rice explains, the thermal stress arises when the contents are heated during the firing because a tensile stress develops on the outside surface of the vessel exactly when the vessel rest in a colder situation.[284]

On the other hand, the thermal stress also affects the resistance of the wall, as the thicker walls are usually more exposed to thermal stress than thinner ones.[285] The amount of thermal stress depends on the intensity and nature of inclusions, both natural and added, as well.[286] Furthermore, the thermal stress depends also on the size of the vessels, for by the big vessel the estimated effects are bigger and more intensive than in the case of the small vessels.[287]

The firing temperature also has a big influence on the size of pores in the material. The higher firing temperature reduces the size and number of pores and the low firing temperature increases the pores and gives the vessel more permeability.

Surface treatment

The surface treatment is also related to the function of use. In Chapter 5 all treatments have been dealt with: the burnishing, smoothing, glazing and coating with bitumen.[288] The potters have used the burnishing for the bowls and the pots sometimes on both sides for reducing the permeability of the vessel walls.[289] The other method is smoothing used for making a smooth surface and give a vessel a more secure grip[290]. Potters from the Middle- and Neo-Assyrian periods used glaze and bitumen on the inside or both surfaces of the pottery to prevent the liquids from soaking into the fabric and worsen its quality.[291]

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[281] DAVIDGE 1991, 478.
[282] RYE 1976, 114.
[283] BAROODY – SIMONS - DUCKWORTH 1955, 38.
[284] KINGERY 1955, 3.
[285] AMBERG – HARTSOOK 1946, 448.
[286] RICE 1987, 228.
[287] CRANDALL, W. B. - GING, J. 1955, 44.
[288] HERRMANN 2016, 85.
[289] HALLY 1983B, 3.
[290] BERRIN - SUNDAHL 1971, 603.
[291] RYE 1981, 24.

The study of surface treatment is essential for the discussion about different functions, for it defines several of them, and is a good trait for the identification. The thickness and resistance of the wall, the firing and the surface treatment together distinguishes the main function groups.[292]

Decoration

In the case of serving and eating vessels the decoration is also an indicator of function. The most decorative vessels are used for serving or eating for showing the financial and social status of the owner.[293] We can suggest that the potters also worked for personal orders and under the pressure of a specific customer. This case the vessels were directly made with the purpose of showing social status and ideology, as well as impressing the guest.[294]

Special features

The jars, pots and sometimes even the deep bowls have appendages such as handles, spouts, lugs, pied or feet and holes.[295] All these features suggest a function associated with transportability, serving and stability of different kinds. The handles were mainly good for transportation, different types of bases could help the stability of the vessels, and whole spouts were used by servings for the liquids.

8.3. Morphological characteristics

The vessel shapes have been classified already according to several different methods, which also suggested their connection to the function. The vessel shape defines the activities and customs which were done during the use of the pottery. The main morphological characteristics are:

1. The size of orifice[296] determines the amount of inner content being accessible by hand.
2. The form of the rim should be everted outwards to serve the easier pouring liquids and solids.
3. The size of orifice, and whether its open or closed, determines how long a vessel is used for storage.

[292] RICE 1987, 232.
[293] ZASLOW 1977, 11.
[294] ASSAVAMS 2011, 4-16.
[295] DUISTERMAAT 2006, 235.
[296] The orifice describes the relation between the size of the mouth of the vessel and its diameter. There are two types of orifices: restricted and unrestricted. The nature of the orifice determines the function of the vessel. RICE 1981, 212-213.

4. The smaller the diameter of the orifice is the better the vessel serves for transportation of liquids, such as wine, oil, milk, etc.

8.3.1. Performance characteristic and morphology

The relation between the performance characteristics and the morphology of the vessel has been studied by several scholars in many ways: Rice and Skibo discussed those four main types of these characteristics can be distinguished. (Table 22 and 23) This study aims to explain these groups and connect them to the question of use and function.

Accessibility

This characteristic of the vessel is defined by the diameter of the orifice, and produces the categories of restricted and non-restricted shapes, which refers to the diversion between the different sub-types of one generally used shape. The main question is how easily the contents were accessible, and how it helped the function.

Stability

Stability mainly describes the level of balance of the vessel, which suggests that various shapes were used for various purposes for they were only suitable for a specific function. It depends mostly on the formation of the bases, which shows that different base-types indicate different morphological categories.

Capacity

It describes the amount of dry and liquid substances being able to fit inside the vessel. Table 21 shows the capacity of the vessels based on their shapes. Furthermore, the size of the vessels is also an important factor of the description.

Transportability

The shape of a given vessel shows whether it was suitable for transportation on a shorter or loner distance, which depends on the form, size and weight of the vessel. Additional features, such as handles and lugs, were created to help with the moving of these ceramics, for it was easier to carry, spill and hols them. (Table.22)

Forms	Accessibility	Stability	Capacity	Supports
Basins	Easy	Easy	Medium	No need
Bowls	Easy	Easy	Small	No need
Plates	Easy	Easy	Small	No need

Goblets	Difficult	Difficult	Small	Need
Deep bowls	Easy	Neuter	Small-Medium	Need and No need
Cooking pot	Difficult	Difficult	Medium-Big	Need
Small jars	Difficult	Neuter	Small-Medium	Need and No need
Medium jars	Difficult	Neuter	Medium	Need and No need
Storage jars and pots	Good	Neuter	Big	Need

Table .22: Physical characteristics of various forms

8.3.2. Physical characteristics related to the function

The form and size of the vessels have a great impact on the suspected function. The different main forms probably were all used for different purposes on short or long term. Examining the technical aspects of pottery production in the light of functional analysis; durability along with thickness and resistance of the wall provide more details of the possible uses of the pottery. For example, liquids could be stored in bigger jars, with thick walls and mineral tempering for a longer period, than the ones with thinner walls and less mineral tempering for they were more porous.[297]

Generally, the forms themselves suggest the suitable functions based on the durability and transportability as well.[298] (Table.22)

[297] ABBINK 1999, 301-302.
[298] ABBINK 1999, 44

Forms	Durability		Transportability		Use
	Dry	Liquids	Dry	Liquid	
	Short Term	Long Term	Short distance	Long distance	
Basins	Good	Bad	Bad	Difficult	Daily
Bowls	Good	Bad	Easy	Difficult	Daily
Plates	Good	Bad	Neuter	Neuter	Daily
Goblets	Good	Bad	Good	Good	Daily
Cups	Good	Bad	Good	Difficult	Daily
Deep bowls	Good	Medium	Easy	Medium	Daily
Cooking pots	Good	Good	Easy	Medium	Daily
Small jars	Good	Good	Easy	Very good	Daily
Medium jars	Good	Good	Difficult	Impossible	Periodical
Storage jars and pots	Good	Good	Impossible	Impossible	Periodical

Table.23: The function of pottery and expected use.

8.4. The main functional groups related to the technical aspects

Cooking pot

These are round vessels, sometimes with and sometimes without a neck. The fabric is coarse and was burnished on both to reduce permeability, and belongs to ware IV. (Fig. 46) The bases always have a rounded body and occasionally traces of soot appear depending on the method of use.[299] If the base is burnt, it clearly indicates that the pot was placed directly in the fire (Fig.46a), if the was pot put over the flames the traces of soot appear on the lower parts of the vessel (Fig. 46b), and when the pot was placed over coals, no traces of soot appear on the surface of the pot (Fig.46c)[300].

[299] KRÄMER 2009, 283
[300] HAWSY 2015. 45

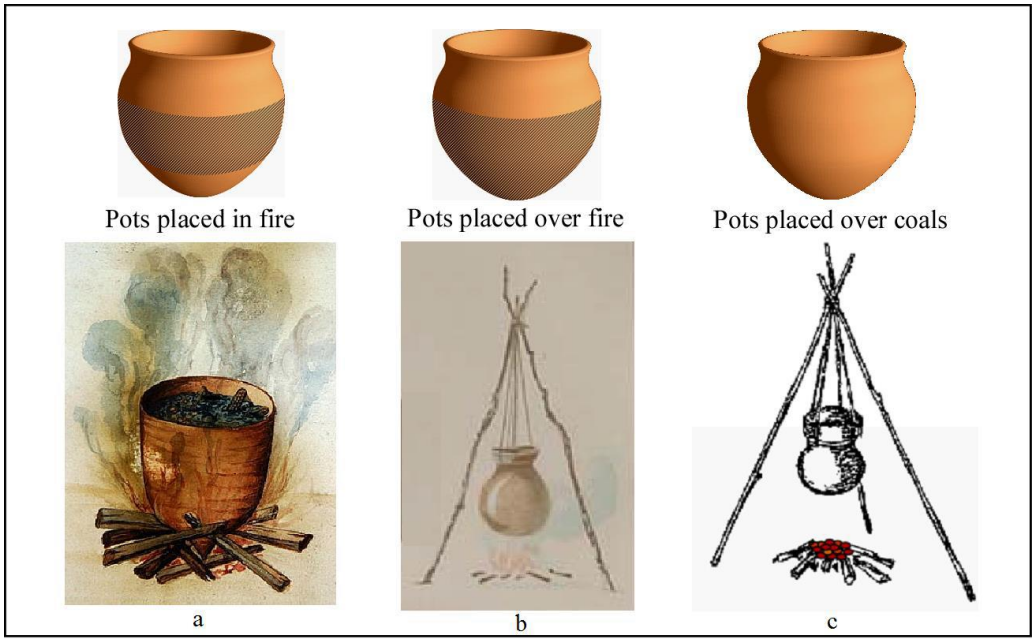

Fig.46: Cooking patterns, After, HAWSY 2015. 45.change the photo

Bowls

Bowls mainly belonged to ware 6. These are open vessels; thus, many traces of abrading and other damages are visible inside the vessels indicating the activity of serving. The appendages on the vessels such as the spout, for pouring the liquids, handles, for lifting, and holes, for suspension, are all related to serving activities.[301]

Pot-stands

Pot-stand, which belonged to ware 2, had cylindrical shapes and they were used to support the jars or the pots. The Tell Kilik Mishik excavations provided different kinds of pot-stands from both the Middle- and Neo-Assyrian periods. Some of them are medium sized and the others are bigger.

Storage vessels

These vessels, belonging to ware 1, could be used either for short- or long-term storage. They exist in different shapes, such as the short-term used jars and long-term used jars or the deep bowls which were likely used for short term storage of dry grains. The jars used for short-term storage mainly consist of those used for liquids and dry goods. For the jars used for a longer term, they always appear larger, are thick walled and stationary, meaning that they were impossible to move and therefore we can infer that they were used to store liquids and dry goods periodically. Some of these jars have decorated outside surfaces with roped and applied decoration and sometimes their

[301] DUISTERMATT 2007, 439.

inside was covered with bitumen for less permeability. Few complete big jars were found at Kilik Mishik with an open orifice (Fig. 47).[302]

Fig.47, Storage jar

Transport

The vessels from this group belong to ware 10. The small jars were moved easily which is beneficial when trying to transport the dry and liquid goods. They are also easy to lift for short and long distances. It could also be used for periodical or daily use. Sometimes these jars have handles to aid in lifting and transportation. The Sheikh Choli vaulted tombs provide several sub-types of these vessels.[303]

8.5. Relating vessel shapes to function

The shape and the method in which the object was produced give us information about the use of the ceramics.[304] The morphology of the vessels ultimately decides its function, and most of the general forms could not be used to satisfy different functions.[305] The significant parts of the vessels are the rim, the body, and the base, while the diameter of the vessels, the neck, and other additional elements can also give essential information. Thus, the classification of the profiles is based on the shape, size, decoration, and appendages such as.[306]

Serving vessels

They are small open vessels. The serving bowls appear to be larger than the ones used for daily eating, and contained soup or dry grains. Many complete plates

[302] RICE 1987, 208-210.
[303] RICE, 1987, 211-222.
[304] STARK 2003, 209.
[305] ABBINK 1999, 163.
[306] KRAMBERGER 2015, 233.

have been found in the Sheikh Choli vaulted tomb which retain traces of fat or oil. (Fig. 44 a) These pieces belong to ware 7, their surface was smoothed and they were formed on a slow wheel.

Eating vessels

The most common type of eating vessels is the bowl, which exists in different sizes: mainly small and medium with decorations, and belonged to ware 6, was burnished or occasionally smoothed, and formed on a slow wheel. The bowls are mostly used to serve the meals. The Sheikh Choli vaulted tomb provided us with two pieces of clear evidence: the first is that the bowl contained bones of animals that were offered to the deceased and the second one is the small jar that carried small bones of an animal but it raises many questions why they put it in the small jar when it should have been put in a bowl (Fig. 44 b).

Drinking vessels

The drinking vessels from the two sites are presented by small jars and goblets.[307] (Fig. 48) The drinking vessels require fine clay, ware 7, and smoothed surface and were manufactured on a fast wheel. The jars served as distributing items for the wine. For example, Tell Kilik Mishik provides a small palace jar. Goblets with U-shapes are the common vessels used for drinking. Even smaller bowls were used for drinking.

Fig.48, drinking goblet (Photo: A. Pshtiwan)

Beer brewing

Beer brewing is a much specialised process which needed a deep bowl with handles and a spout, or storage pots with holes on the base. They were made by coiling

[307] DUISTERMAAT 2007, 233.

or on a slow wheel, were burnished, and belonged to ware 5. Unfortunately, neither of the sites has provided samples of this kind of vessels. The similar process was used for the juice making. A small jar with a base-hole and a semi-globular body, and restricted neck was found at Tell Kilik Mishik. (Fig. 49A and B)

Fig. 49. A

Fig.49. B

Fig. 49, Beer brewing Jar, (Photo: A. Pshtiwan)

8.6. Other functional categories

Covers

The cover of the bowls and the pots were used during the cooking, for reaching higher temperature inside the vessel, and to keep the boiling or cooling material in.

Strainers

This kitchen vessel, with many holes was used to filter different types of foods. These were usually small, bowl shaped vessels, sometimes placed on the top of the jars to strain the liquids from inner ingredients. (Fig. 50)

Fig. 50, Strainer, After, Ibrahim 2013, fig.4

Handles or lugs

These additional features of the vessels were used during lifting and transporting of the pottery. Handles could also be useful for the serving vessels. They were applied to the body and neck of the pottery. Unfortunately, no samples of handles were found at the examined sites.

Spouts

These were used to help the precise pouring of the liquids from the vessel. The forms which the spouts usually appear on are bowls, pots and jars. In general they were applied to the orifice, neck, shoulder and body.

Tripods

Tripods were used to support the vessels during standing, and were applied to the base of the pottery (Fig. 51).

Fig.51 Tripod Jar (Photo: A. Pshtiwan)

8.7. Evidence of use

Discussing the evidences of use it is essential to focus both on the inner and outside traits, as well as the content. Sometimes the vessels carried the residue of several materials that were used, such as salt, organic substances, animal fat, wine, oil, etc. (Fig. 44 A, B, and C) Also damages and other physical traces can be visible, such as scraping, stirring, mixing, grinding. These actions were performed repeatedly and left scars on the inner surface of the pottery. Scrapes on the outside can also appear, for they were mainly resting on the ground, and also occasionally turned around during

mixing (Fig.44 B).[308] The other traces soot, presented mostly on the upper part of the pots. The soot is composing of carbon and resins and is created due to the flame of the fire (Fig. 44 B)[309]

[308] ROSE 1989, 82-101.
[309] RICE 1987, 232-235.

9. Comparison

Introduction

Northern Mesopotamia is an ideal place for archaeological research for it was the land of various prehistoric civilization. Due to political reasons the territory was left out of the archaeological missions carried out by the Iraqi government. After the government change in 2003, the political situation has changed and archaeological surveys and excavations started in the three main provinces of the Kurdistan region.

The pottery distribution and trade in the region was studied in connection with Kilik Mishik. The first step was to distinguish the different groups based on the combination of the clay and tempering, suggesting that they were probably used by the same potter or a same manufacture. The geological location of the site and the natural elements found in the material of the vessels also help in the identification of the origin of the ceramic. The clay accessible from the site determines the usable materials as well. The next step was to identify the local and imported wares and sherds.

In general, the main focus is to name the sub-regions in Iraqi-Kurdistan, such as Erbil, Sulaymaniyah and Dohuk, and to compare their pottery tradition to the Assyrian heartland, Assur and Nineveh.

9.1. Methodologies of comparison

The comparison study was mainly based on the morphological features of the pottery, such as rims, bodies and bases. For the Neo-Assyrian samples, the study of the fabric, inclusions, formation technique and surface treatment has been carried out as well, based on the pottery found in Grd-I Tle.

For the comparison several samples from various sited has been chosen, published and unpublished as well. This study gave new information of the pottery tradition regarding the northern Iraq region, for no summery has been carried out yet.

For the Neo-Assyrian material from Kilik Mishik, the paralells from Grd-i Tle have been used, which seemed rather similar to the material discussed in the previous chapters. Furthermore, several fabric groups were also similar to the ones recognized on the material from Gird-i Bazar, such as tech p.4, tech p.5, tech p.6, and tech p.7. Based on the similarities one can assume that there was a relation between those border sites.

The recent excavations provided new information about the local pottery tradition in Iraqi-Kurdistan particularly in the Iron Age. Unfortunately, the results of the excavations since 2003 are not yet published, although a huge amount of Middle and Neo-Assyrian ceramics were found. The comparison of the materials from the sites with their archaeological context and stratigraphy could provide more information regarding the history and the material culture of the region.

9.2. Erbil plain

As mentioned before, the plain of Erbil is one of the neglected areas in the region of Kurdistan, but after 2009 archaeological missions have carried out many activities such as surveys, excavations and etc. From the 1950s and 1960s, some archaeologists such as El-Amin and Mallowan have taken short surveys and excavations on the plain of Makhmur which is located around the city of Makhmur itself.[310]

The plain of Erbil is located between the Greater Zab in the north-west, the Lesser Zab in the south-east and the Tigris in the west. The plain of Erbil includes plain of Makhmur, plain of Dibakah and plain of Erbil city.

The region of Erbil was under the domination of the Assyrian Empire. The previous excavations provided enough clues to prove the presence of the Middle and Neo-Assyrian pottery. As the recent excavation in several sites have shown the remains of these periods are present, though unfortunately, the excavations are not finished, and the results have not been concluded and published yet.[311]

The plain of Erbil took a significant role in the Assyrian empires. Its strategic position and its strength allowed it to join in commercial and military activities. This civilization has extended its power to neighbouring countries such as Syria, Anatolia, the Mediterranean and Egypt as well; as a result, a mix of cultures and ideas was created in the region, and they left a great influence over the territory, which had a suitable climate for agriculture. They took many military campaigns against the people who lived on the borders of the empire, such as the Urartians, Subarias and etc. Their activities were shown on their reliefs which mentioned their victory against the mountain peopíle and the agricultural activities such as the building of the canals.

[310] EL AMIN – MALLOWAN 1949, 150.
[311] EL AMIN – MALLOWAN 1950, 60.

On the plain of Makhmur, during the excavations at El Amin by Mallowan, a considerable amount of Middle Assyrian potter was found. Though the study of the material was not carried out, the dating of the sherds seems to be quite certain. Tell Aqrah also provided different kinds of vessels from the graveyard, such as the jars, and carinated bowls from this period. From the tell of old Makhmur further sherds originate, mainly found around Temple II and III.

Neo-Assyrian pottery, small jars and bowls, have been observed in Kaula Kandal as well in the graveyard.[312] In level IX at Tell Aqrah a serving room was unearthed with jars with knob and nipple bases.[313] (Table. 24) and (Fig.53)

The sites	**Periods**	
	Middle-Assyrian	Neo-Assyrian
Tell (Ibrahim Bayis) old Makhmur	Room 2	Temple II - III
Tell Aqrah	IX	Graveyard
Kaula Kandal	Graveyard	Graveyard

Table.24, the sites in plain of Erbil

Other sites

One of the most important sites besides the ones mentioned before is Qasr Shamamok which has yielded Middle and Neo-Assyrian ceramics. Most of the sherds from the period came from the excavations of the Italian archaeologist Furlani from 1933, but his study has not been completely published yet.[314] (Table 25)

The sites	**Periods**	
	Middle-Assyrian	**Neo-Assyrian**
Tell Qasr Shamamok	Italian excavation 1933	
Tell Al-Qasra	III-IV	III
Tell Mamostayan[315]		survey
Bash Tepe	Second trench	
Arab Quartier Tomb-Erbil		Tomb
Satu Qala[316]`	-	Operation A,B
Tell Baqrta[317]	Survey	
Helawa [318]	Survey	

Table.25, the sites around the city of Erbil

[312] EL AMIN – MALLOWAN 1949, 158
[313] EL AMIN – MALLOWAN 1950, 62
[314] ANSTASIO 2011, 343.
[315] AHMAD 2016, 30
[316] SOLDT- PAPPI- WOSSINK – HESS – AHMED 2013, 197-239, 201-207, PAPPI 2016, 299-303.
[317] KOPANIAS- KOSTAS – MACGINNIS - UR 2015, 8.
[318] KOPANIAS- KOSTAS – MACGINNIS - UR 2015, 29

9.3. Sulaymaniyah plains

The second biggest province in the region of Kurdistan is Sulaymaniyah, which was occupied for a long period. The sites explained below are the ones occupied during the Middle and Neo-Assyrian period. For example, the level II and III of Tell Sitak, located in the district of Sharbazher in north Sulaymaniyah, belonged to the discussed time period. At this site mostly serving vessels were found, but the material has stayed unpublished.[319] (Fig.51)

9.3.1. Peshdar plain

The Peshdar plain is located east of the Sulaymaniyah province, right on the border with Iran, and it adjoins the administrative district of Raniyah. It is located between the valley of the Lesser Zab and Qandil mountain range with the highest peak of Kuh-e Haji Ebrahim around 3,587m.[320] (Fig.51)

The most important site in this region is the Qalati Dinka with its lower town Gird-i Bazar, which has been excavated from 2015. During the archaeological works a special, local tradition of Neo-Assyrian pottery could be identified.[321] The second site, with proof of Neo-Assyrian occupation, is Qalat Said Ahmadan.[322] (Table 26)

The publication of the Peshadar plain project is the most detailed one regarding the fabrics and technique of the pottery production of the Iron Age in Iraqi Kurdistan. The pottery was studies by Jean-Jacques Herr in 2015-2016 and by Jean-Jacques Herr, Abdullah Bakr Othman and Hero Salih in 2017. These studies make possible to compare the details of the pottery production to the ones already discussed in this thesis.

Unfortunately, the other sites in this region connected to the giver time period are not yet published.[323]

The sites	**Periods**	
	Middle-Assyrian	**Neo-Assyrian**
Girdi Bazr-Qalati Dinkah	-	All trenchs
Qalat Said Ahmadan	-	Operation A, I and II and Area G

Table.26. the sites of Peshdar plain

[319] SABER - HAMZA - ALTAWEEL. 2014, 205-229.
[320] RADNER 2016, 11
[321] RADNER 2016, 11, RADNER 2017, 11.
[322] TSUNEKI A ET EL, 2014, 1-63, TSUNEKI, ET AL. 2015, 129.
[323] HERR 2015, 80-100, HERR 2016, 104-127, HERR-OTHMAN-SALIH 2017, 120-133

9.3.2. Sharazur plain

The Sharazur[324], The Sharazur plain has been partially flooded by the Darbandi-Khan dam which was built on the upper reaches of the Diyala River; near the confluence of the two rivers: AL-Tanjarô and Sîrwan. The dam is located around 60 km southwest of Sulaymaniyah city.

It is surrounded by the ranges of mountains from 1200 to 1500 meters high, with the exception of the north-west, where it continues to expand. To the east, the Hawraman mountain range, which summit is about 3000 meters high, borders many towns and villages.

The most important cities, Khurmal and Halabja are located in the extension of the plain, to the north. The plain is generally used for agriculture and pasture; among other crops, wheat, barley, rice, maize, flax, cotton, tobacco, and beet were introduced in the region. The soil is fertile but very fragile as it contains organic matter and metals. Sharazur, known in history, was one of the richest regions of the antiquities in Iraq and it is also a wide field open for research and exploration.[325]

This plain gives place to a wide range of archaeological sites and settlements, which are from different eras and periods, from the Palaeolithic to the present day. Some of these floodplains are important sources of dating the area. It should also be remembered that the Directorate General of Antiquities through the exploration of these sites has helped to discover new cultures, including civilizations that manufactured very rare pottery that has never been attested before, neither in Iraq or elsewhere. The excavation at these sites in the plain Sharazur provides a small amount of the Middle Assyrian ceramics but unfortunately the works have not published yet.[326] (Table.27) (Fig 51)

The sites	Periods	
	Middle Assyrian	Neo-Assyrian
Tell Kurtas	II	-
Tell Bakr-awa	III-VI	-
Tell Shamlo	III-VIII	-

Table 27: The sites from Sharazur plain

[324] WAHBI 1961, 129.
[325] HIJARA 1975, 129.
[326] AL-JANABI 1975, 275.

The sitses
1- Sheikhi Choli vaulted Tomb
2- Tell Kilik Mishik
3- Tell Mmostayan
4- Tell Qasra
5- Tell Qasr Shamamok
6- Tell Hellawa
7- Bash Tepe
8- Tell Baqrta
9- Satu Qala (Idu)
10- Tell Kuala Kandal
11- Tell Ibrahim Bayis
12- Tell Akrah
13- Telul Aqrar (Kar-Tukulti-Ninurta)
14- Qalat Sharqat (Aššur)
15- Nimrud (Kalkhu)
16- Nineveh
17- Tell Bassetke (Mardaman)
18- Grdi-Tle
19- Qalat Said Ahmadan
20- Qalati-Dinkah
21- Tell Sitak
22-Tell Shamlo
23-Tell Kurtas
24-Tell Bakr-Awa
25-Tell Al-Rimah
26-Tell Chemchemal (Arzuhina)
27-Arrapha (Modern citadel of Kirkuk
28-Arab Kon tomb

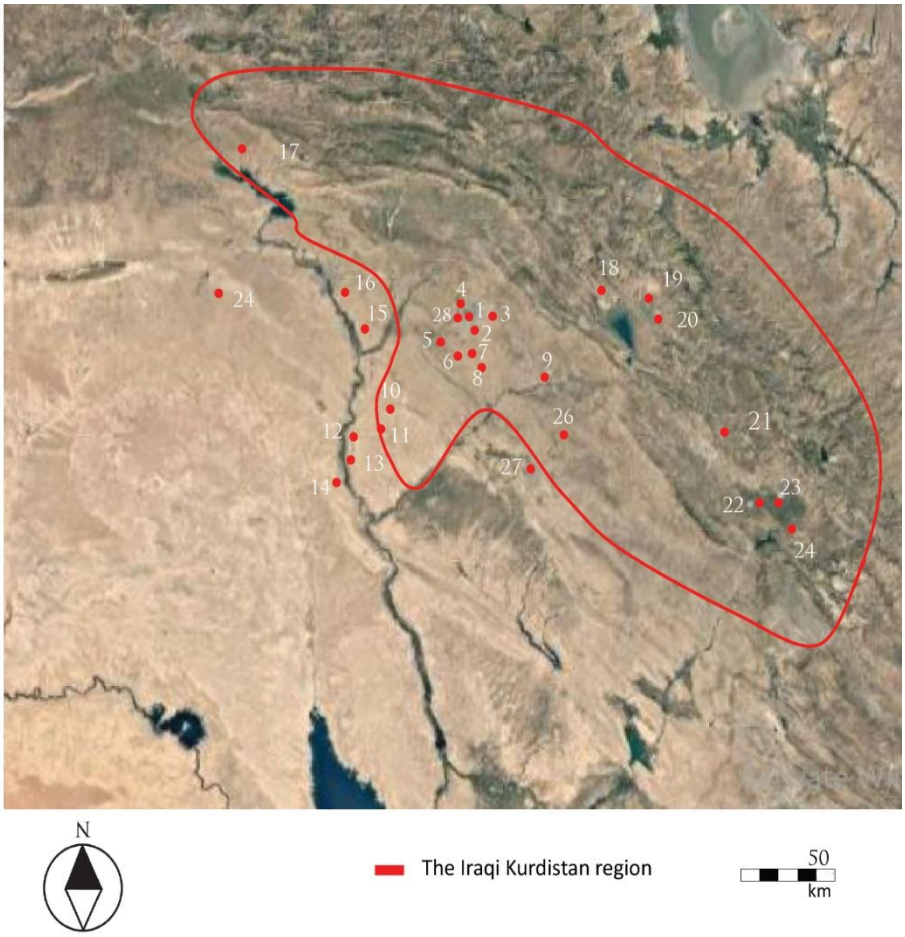

Fig.51: The Middle and Neo-Assyrian sites in Iraqi Kurdistan

9.3.3. Raniyah plain

The Dokan dam was built on the lesser Zab from 1954 to 1958, so in 1955 there was a need to carry out rescue and salvage excavations and surveys by the Department of Antiquities and Heritage with the cooperation of Copenhagen University, before the Dokan lake overflew a big part of the plain,

The results of the excavations indicated that the occupation of the area belongs to the beginning of the 6th millennium BC and continued until the Islamic periods.[327] (Table.28) (Fig. 52)

Several sites around the dam on the Rania plain have Middle and Neo-Assyrian occupation layers.[328] The previous and recent excavations on this plain have not yet been published. On the other hand, it should be mentioned, that other sites such as, Qalati Derband and Usuwaska, which have been excavated by the British Museum and have massive Neo-Assyrian layers and a huge amount of the period's pottery,

[327] ABU AL-SOOF 1970, 65-82.
[328] TENU 2009, 356.

including palace ware, have not been published as well. With the study and publication of the pottery these sites may shed a new light on the ceramic tradition and the history of the region.

For a long time, this region was neglected as well and no archaeological surveys and excavations were carried out. The city of Dohuk is one of the border cities on the Iraqi, Turkish and Syrian border. Its location was important during the Assyrian empires as well. In the norther part of the province, there is the Zagros mountain range which was always the target region for the Assyrian military campaigns against the mountain people. During the recent years, several archaeological activities have been going down in this region. The new surveys in the province of Dohuk have started in 2013 by the Eastern Khabur Archaeological Survey project carried out by the Tübingen University. The director of the project was Professor Pfälzner. During the survey many mounds have been registered, from which one of the most important was Bassetki, with a significant Middle and Neo-Assyrian occupation.[329]

The plain of Selevani is a big plain in the province of Dohuk which is the location of the sites: Batel, Basseki, Muqable I, Muqable II and Muqable III.[330] The excavations at these sites provided huge amount of Middle and Neo-Assyrian ceramics but unfortunately the results have not yet been published.[331](Fig.51).

The sites	Periods	
	Middle-Assyrian	Neo-Assyrian
Tell Basmussian	III	-
Tell Shemshara	IV-VIII	-
Girdi Bur	-	Survey
Mullah Umar	-	Survey
Kamarian	Survey	-
Butan	Survey	Survey
Ed-Dem	Survey	Survey
Kullah	Survey	Survey
Tankija	Survey	Survey
Kullah Kawi	Survey	Survey
Qara Qaj	Survey	Survey
Mullah Shell	Survey	Survey
Hais	Survey	Survey
Babu Gawran	Survey	Survey
Mmamnd	Survey	Survey
Tepe Gawran	-	Survey
Kulak	Survey	Survey

[329] PFÄLZNER 2015, 90.
[330] PFÄLZNER- QASIM- SCANZO- PULIJIZ 2015, 46.
[331] PFÄLZNER 2017, 12.

Paera post	-	Survey
Qara shina	Survey	Survey
Serkomah	Survey	Survey
Buskain	Survey	Survey
Kullan	-	Survey
Kundu	Survey	Survey
Quralla Nort	Survey	Survey
Quralla South	-	Survey
Ghaznah	Survey	Survey
Araban	Survey	Survey
Kirdel	Survey	Survey
Qabr es-Sahabah	Survey	Survey
Mhmud Habbas	-	Survey
Qara Tepe Kun	-	Survey

Table.28: The sites from the dam of Dokan

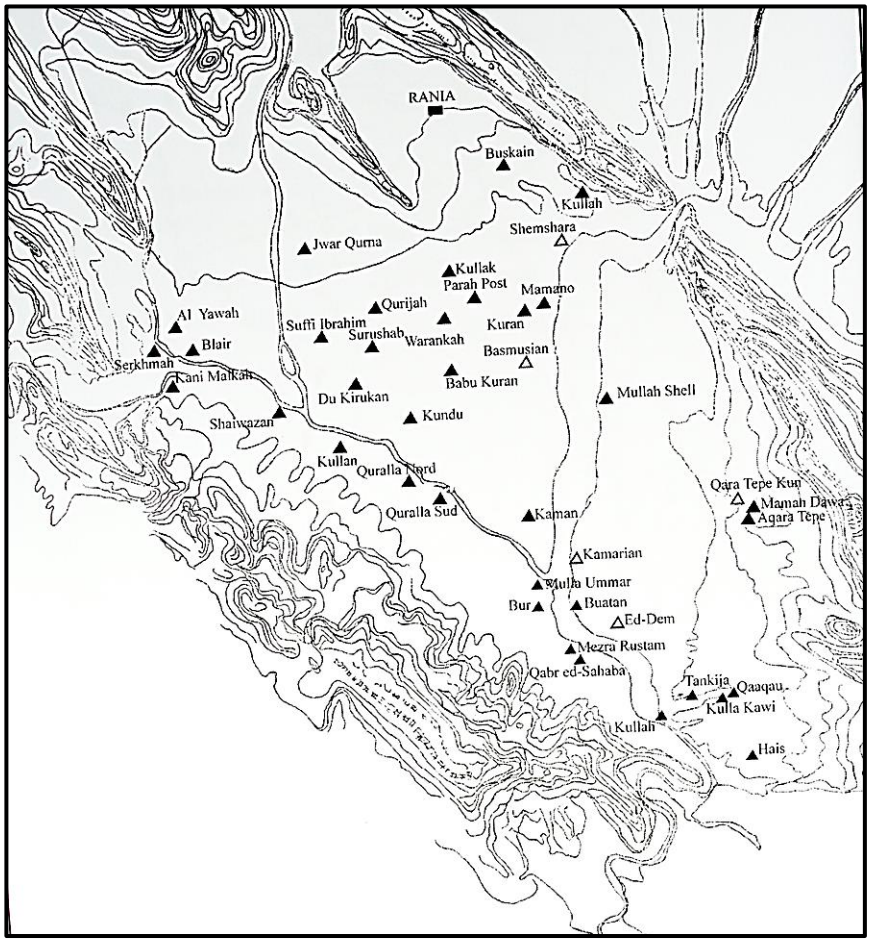

Fig.52: The sites of Rayna plain, After ABU AL-SOOF 1970, PL.1

Grd-i Tle

In the western part of the Raniyah district another open plain is located which is called the Bitwen plain, and several sites are located there. One of the most important sites is the Grd-i Tle which has been excavated by the Eötvös Loránd University, Budapest since 2016 and the archaeological work still goes on.[332]

The tell has a key position regarding the Assyrian military campaigns towards western Iran, which made the settlement an important border city of the empire. The significance of the site suggests to compare its materials with the ones found at Kilik Mishik.

In 2016, during the first excavation season and survey on and around the tell, pottery from different periods were discovered: prehistoric, Assyrian, Parthian and Islamic.[333]

In the third season, in 2018, the team reached the clear Assyrian context, from which many sherds, and few complete vessels of Neo-Assyrian pottery was discovered. The materials have been compared to the ceramics from Kilik Mishik, and it was clear that several wares were identical, both from the coarse, medium and fine groups.

From locus 212 and 203 two collections of ceramics have been studied for our comparison in detail, although only 10 sherds were chosen as a samples presented here:

Sample 1; GDT.203.1/5

Sherd's locus: 203

Sherd's package unit: 1033

Shape: Bowl

Plate 66

Mineral inclusion

1% small with sub angular

1% small mica

7% small and big gray sub-angular

Organic inclusion

[332] DEZSO ET AL. 2016, 376, DEZSO ET AL. 2017, 361-392

[333] DEZSŐ ET AL. 2016, 232.

Approximately 2% of fine organic inclusions distributed on the surface and into the core.

Surface treatment

The surface in general does not present any treatment.

Firing and temperature

The estimated firing level is medium, with a black core.

Remarks

This fabric is similar to the fabric H.

Sample 2; GDT.203.1/3

Sherd's locus: 203

Sherd's package unit: 1033

Plate 66

Mineral inclusion

The mineral inclusions are 5% of small mica with shiny colour and calcite white sub-angular shape

Organic inclusion

Approximately 1% of fine organic inclusions distributed on the surface and into the core.

Surface treatment

The surface in general does not present any treatment.

Firing and temperature

The estimated firing is medium with a black core.

Remarks

This fabric is similar to the fabric G.

Sample 3; GDT.212.1/19

Sherd's locus: 212

Sherd's package unit: 1049

Shape: pot

Plate 66

Mineral inclusion

The mineral inclusions are about 15% sub-angular white and grey pieces.

Organic inclusion

Approximately 1% of fine organic material distributed on the surface and into the core.

Surface treatment

The surfaces in general is inside and outside burnished.

Firing and temperature

The estimated firing is medium with a black core.

Remarks

This fabric is similar to fabric B, in addition this fabric is tipically used for making pots and it is also similar to tech p.4 from Gird-i Bazar. The pots from Grd-i Tle are from same fabric and with the same technique.

Sample 4; GDT.212.1/48,31

Sherd's locus: 212

Sherd's package unit: 1049

Shape: pot

Plate 66

Mineral inclusion

The mineral presents about 15% sub-angular white and grey inclusions with 1% mica.

Organic inclusion

Approximately 1% of fine organic.

Surface treatment

The surfaces in general, the inside and outside are well burnished.

Firing and temperature

The estimated firing is medium with a black core. And the trace of the soot of flame on the body and the shoulder of the pots have been observed.

Remarks

This fabric is similar to the fabric B.

Sample 5; GDT.212.1/33

Sherd's locus: 212

Sherd's package unit: 1049

Shape: pot

Plate 66

Mineral inclusion

The mineral presents about 15% sub-angular white and grey inclusions.

Organic inclusion

Approximately 1% of fine organic distributed on the surface and into the core.

Surface treatment

The surfaces in general are burnished on both sides

Firing and temperature

The estimated firing is medium with a black core. And the trace of the soot of flame on the body and the shoulder of the pots have been observed.

Remarks

This fabric is similar to the fabric B.

Sample 6; GDT.212.1/40

Sherd's locus: 212

Sherd's package unit: 1049

Shape: Jar

Plate 66

Mineral inclusion

The mineral presents about 10 small gray sub-angular

Organic inclusion

Approximately 1% of fine organic.

Surface treatment

The surfaces on the inside and outside are well burnished.

Firing and temperature

The estimated firing is medium with a black core.

Remarks

This fabric is similar to the fabric A3.

Sample 7: GDT.203.1/4

Sherd's locus: 212

Sherd's package unit: 1033

Shape: Jar

Plate 67

Mineral inclusion

The mineral presents about 1% sub-angular white inclusions

Organic inclusion

Approximately 1% of fine organic.

Surface treatment

The surfaces was smoothed on the inside and outside as well..

Firing and temperature

The estimated firing is medium with oxidizing atmosphere.

Remarks

This fabric is similar to the fabric E, a fine ware

Sample 8: GDT.212.1/41

Sherd's locus: 212

Sherd's package unit: 1049

Shape: Jar

Plate 67

Mineral inclusion

The mineral presents about 1% sub-angular white inclusion,

Organic inclusion

Approximately about include 1% of fine organic.

Surface treatment

The surfaces is on the inside and outside well smoothed.

Firing and temperature

The estimated firing is medium with oxidizing atmosphere.

Remarks

This fabric is similar to the fabric E, and it is fine ware

Sample 9; GDT.212.1/34

Sherd's locus: 212

Sherd's package unit: 1049

Shape: Jar

Plate 67

Mineral inclusion

The mineral presents about 5% rounded and sub-angular white and gray inclusions.

Organic inclusion

Approximately included 5% of fine organic inclusions.

Surface treatment

The surfaces outside is well smoothed.

Firing and temperature

The estimated firing is medium with a black core.

Remarks

This fabric is similar to the fabric G. It is the same as fabric C2 with technic 6-a of Grdi bazar.

Sample 10: GDT.212.1/5

Sherd's locus: 212

Sherd's package unit: 1049

Shape: Jar

Plate: 67

Mineral inclusion

The mineral presents about 1-5% small white and grey sub-angular inclusion.

Organic inclusion

Approximately included about 1-5% of fine organic tempering.

Surface treatment

The surfaces in general the inside and outside are well smoothed.

Firing and temperature

The estimated firing is medium with oxidizing atmosphere.

Remarks

This fabric is similar to the fabric H, for it is fine ware

Shapes and fabrics

The comparison study was carried out based on two aspects: the shapes and the fabrics, mainly focusing on the shapes, for most of the materials are not yet published.

The only detailed publication about the fabric itself have been made by the Peshdar Plain Project on the ceramics of Gird-i Bazar. The three volumes on the ceramics published contain details and updated information about the fabric groups. Connecting the fabrics and morphological types to the main ware groups is essential.

Ware 1: this ware was used for big stable jars and basins, usually with very coarse temper, with more mineral than organic inclusions. A similar group was found

at Gird-i Bazar.[334] Also the same fabric was found at Grd-I Tle, but their results have not been published yet.

Ware 2: This ware was tempered mainly with organic material. A close parallel was found in Qasr Shamamok on the Erbil plain used for bowls, plates, jars and pot-stands.[335]

Ware 3: In this type more organic temper was observed than in the previous one. A similar material has been found at Gird-i Bazar in Qaladze.[336]

Ware 4: This fabric is a common one in Iraqi Kurdistan mainly used to make cooking pots during both periods. This type of fabric was used in Gird-i Bazar, Grd-i Tle and other sites as well. Unfortunately, those materials have not been published yet.[337]

Ware 5: This ware is characterised by the use of fabric C which was tempered with more mineral inclusion. The same kind has been identified at Gird-I Bazar and Grd-i Tle.[338]

Ware 6: Fabric D was used for the creation of this ware, with a considerable amount of mineral, and a small amount of organic temper. Though no similar fabric has been found at other sites, but the forms belonging to it are parallels to the ones from Qasr Shamamok.[339]

Ware 7: It was created by using fine clay, and was used for fabricating small shapes, such as goblets and small jars. The same fabric has been found at Gird-i Bazar which is known as the common ware, because a huge amount of it was unearthed.[340]

Ware 8: This material was used to create plates and bowls at Kilik Mishik, Sheikhi Choli vaulted tomb and Qasr Shamamok[341].

Ware 9: It counted as a medium fine ware suitable for jars, strainers and bowls. The same morphological form has been observed in the Arb Kon tomb in the city of Erbil.[342]

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[334] HERR 2016, Fig.E1.14; ppp 269929:026:010
[335] ANASTASIO 2011, fig. 6-h
[336] HERR-OTHMAN-SALAH 2017, Fig. F17.7: 235934:018:001:003.
[337] HERR 2015, 90, Fig. D2. 6: 1-2
[338] HERR 2016, Fig. E1.13: Nos.1, 2-3.
[339] ANASTASIO 2011, fig. 4.d
[340] HERR 2016, Fig. E1.15. 269929:005:006:002
[341] ANASTASIO 2011, fig. 4. i
[342] HAUSLEITER ET AL 2012, plate 9. B. ARB .16

Ware 10: This ware was created with medium amount of the mineral and organic temper and was for creating the tripod, medium size jars and bowls. The same fabric was found in Area A at Tell Qasr Shamamok.[343]

Although most of the materials from different sites have not been published yet, and no detailed study have been carried out regarding the fabrics of the pottery, the morphological parallels give a general overlook on the main pottery types appearing in the region. Probably soon there will be a chance to carry out a comparative study with the pottery from the heartland of the empire: Assur, Nimrud, Nineveh.

[343] MASETTI-ROUAULT – CALINI 2016, fig.8

10. Conclusions

Firstly, the methods used during the study were presented. These are the most widely-used methods which have been utilized by eminent scholars such as Rye and Rice. They are considered to be one of the most reliable pottery specialists.

For the samples the diagnostic sherds were chosen, such as the rims, bases, handles and body sherds with decoration. All the samples have been drawn, registered and descried.

The study of the typology and the fabric of the pottery was carried out. The observation of the mineral and organic inclusions was a key step of the research, for determining the basic material of the vessels. For the morphological study all measurements were recorded, such as rim and base diameter, etc.

The typological study has been carried out based on the forms of the vessel. Many scholars attempted to create a classification system based on identifying objects through a description of their morphological characteristics[344]. The classification system introduced all the various vessel forms such as the open vessels[345]: bowls, plates, basins, plates strainers, and goblets or cups. The second group consisted of the closed forms: jars. The third group is the pot stand.[346] Another method is to classify the individual attributes of the vessels, such as the rims, necks, body and bases.[347]

This system provided various types, which are extensively precious for the morphology of the vessels.[348] However some important considerations should be made in the way that we classify them based on their physical appearance but we should also look at them theoretically, as we also need to consider all aspects of the different types.[349] Some scholars use the word model, to signify the types or technics.[350]

For the Middle Assyrian period, the most popular shapes proved to be the jars, bowls, plates, goblets, strainers, pots, body sherds, and pot-stands. The most common rim for the jars is round to outside (type 1010). The most used necks are concave (type 3000) and the body walls are ovoid (type 4000). For the bowls, the bevelled rim (type 1000) is the most common rim, the convex wall (type 6000) is the most common wall, while the disk base (type 2001) is the most common base. For the other vessel forms,

[344] WHALLON 1972, 13, HILL-EVANS 1972, 231
[345] ROUSE 1944, 203, ROUSE 1960, 313.
[346] SPAULDING 1953, 350.
[347] NESS 2015, 311, HRUBY 2010, 114.
[348] WHEAT - GIFFORD- WASLEY 1958, 34.
[349] FORD 1954, 42
[350] HILL- EVANS 1972, 231

the classification of the detailed typology has not been done due to the lack of sherds. In general, the most used rims are the bevelled rim (type 1000) for all the shapes and the most common bases are the disk base (type 2001).

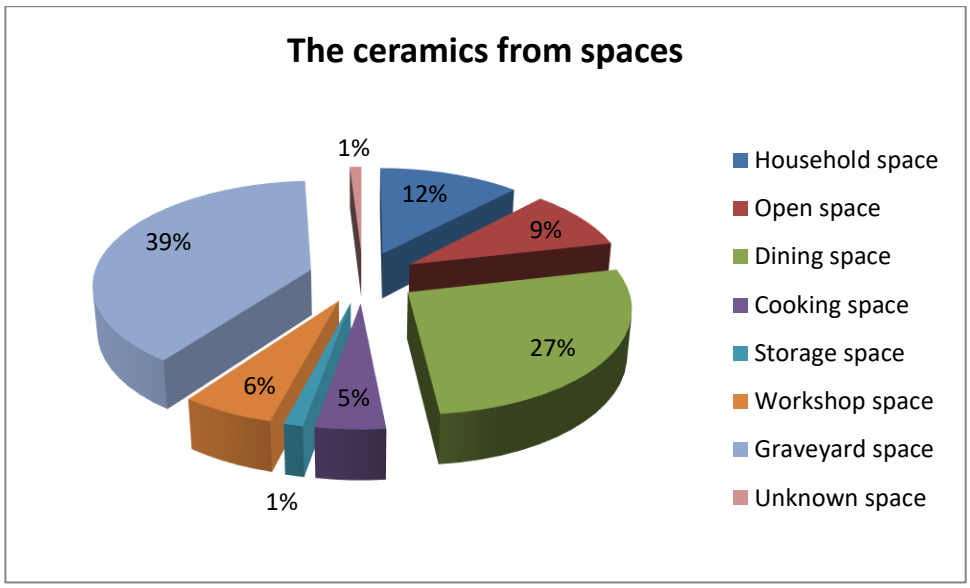
For the Neo-Assyrian era, the classification is more detailed because of the different vessel forms appearing newly in this period. The classification system study is the same system as the one that was applied to the Middle Assyrian ceramics. The shapes are jars, bowls, goblets, pots, pot-stands, basins and strainers. If we consider the jars, starting with the rim, type 105 with horizontal folded shape is the most common style. The type of the necks which appeared most frequently was the concave type 300. The globular type 401 is the most common body type to be found and the type 200, ring base is the most common base. The second shape to be considered from the Neo-Assyrian period is the bowl. Examining the rims, the bevelled type 101 is the most common, the convex neck, type 400 is the most used and the type 203 with a disk grooved base is the most frequently used base. The goblets are another wide-spread shape and usually have very fine walls. The most popular rim is the bevelled and the body wall with a U shape is the most common wall form. The other open shape that must be discussed is the pot. The most common rim is the horizontal folded rim (type 105). Regarding the necks the typology of the jars was used to help identify them in the case of the post. The most popular is type 300 with concave walls, and the body is globular with type 800, because the body of the pot is open and big.

In general, the most widely used rim for all the shapes is the protruding rim (type 106) and the most common base was the one with a ring (type 200).

Above all, for the study of the Middle and Neo-Assyrian ceramics the function and the archaeological context should be discussed. According to this types eight types could be distinguished. (Graph.57)

12% of the ceramics belonged to households, and have different forms and function, such as bowls or small jars. The pottery found in open spaces at Killik Mishik make up around 9% of all the ceramics. No specific form was identified for this context. The second biggest amount, about 27% of the pottery came from dining spaces. The main forms found were goblets, jars and plates. 5% of the pottery was unearthed in cooking spaces, where mostly cooking pots were found, due to their very specific function. The spaces that always provide the big and medium storage jars both for short and long term, are the storage spaces. At Kilik Mishik many fragments of big stable storage jars have found but unfortunately have not been preserved. Only a few

sherds were registered. These ceramics only make up 1% of the pottery material. In workshop spaces, which are indicated by the presence of a kiln with slags of ceramics around it. 6% of the pottery was found in the workshop space at Kilik Mishik. The pottery found in graves and in graveyards usually is of a smaller size and was created for a short-term use. Furthermore, many traces, such as oil, wine, fat and perfume could be observed. These ceramics are always decorated with incision, paint or glaze, for these tombs mainly belonged to the elite social class. 39% of the material from Kilik Mishik and the Sheikhi Choli tomb belonged to this category. Only 1% of the ceramics came from spaces of unknown use. Various types belonged to these sherds, such as jars, pot-stands, etc.



Graph 57: The ceramics from different spaces

The Middle and Neo-Assyrian ceramics formed ten fabric groups, from the very coarse to the very fine ware. The most frequently used types were determined, as well as the raw materials which were compared with the natural clay around the sites.

The very coarse types are fabric A1, A2 and A3. Fabric A1 present more mineral inclusion, on the contrary, fabric A2 has mode organic inclusion. Fabric A3 is similar to fabric A2 but the inclusions have a round shape. Furthermore, coarse fabric is represented by fabric B, C and D, while for fine vessels – probably painted, glazed or coated with bitumen – fabric E, F, G or H was used. The main raw materials regarding the tempering were mica, calcite, fine sand, feldspar, grog and quartz. Grog, crushed pieces of pottery, was used for tempering in both sites during both periods.

A discussion about the function of those vessels found is perhaps the most essential topic during a pottery study. Both the archaeological context and the fabrication characteristics of the sherds are key information to determine the function of the vessels. In the case of most of the pottery the function could be determined.

The characteristics of the vessels have also been taken into account for this research; factors, such as the fabrication, characterization of the wall, the resistance of the wall, and thermal stress. Particularly useful research has been undertaken recently on the function and can be referred to in articles by Kingery, Rye, Rice, Abbink, Skibo, Kreppner, Pfalzner, Stark and Kim Duistermaat. Ethnographic studies indicate that there is a relationship between vessel shape and its use as well.

This study shows that the inhabitants from both sites produced vessels in different shapes. The morphological features have been studied for they effected the daily activity. By the examination of the size, thickness of the wall, inclusion, surface treatment, and firing temperature of these vessels, important conclusions could be made regarding their intended function.

Furthermore, the inclusions were studied as well, for they do affect the function of the vessel greatly. The permeability, porosity, and density have demonstrated that the potters had a great deal of experience when they intended to decrease the permeability. This was usually achieved by using more minerals or burnishing the vessels to adjust the permeability and porosity.

The thickness also appears to be indicative of the function. The potters made their vessels carefully and created a thicker section on the upper part and the thinner section on the lower part. This made the vessel easier to move and allows the contents to be heated more easily. Based on their morphological form, we can identify the purposes of the vessel. For example; the pot was made for cooking, the stable big jars for storing, the jars with handles for transporting, the bowls and jars with a spout for pouring, the bowls with a pedestal base for serving, the goblets for drinking and the basins for washing. Some attributes to the form can also be seen such as the holes under the rim for hanging, a single hole on the base for draining the liquids, etc.

The potters used numerous ways to keep the contents from permeating the surface of the vessels. They used burnishing and smoothing techniques as well as glazing. Sometimes, they used bitumen to cover the interior as well as the exterior.

Aside from these factors, the fact that the decorations can also determine the function is considerable. The most decorative vessels were used for serving or eating because of their features, and had a prestige value.

Skibo, who studied the function and use of the pottery, focused on three points; the carbonization, attrition, and residue. These are the traits that were left by the users.[351] The outside of the pots, for example, holds evidence of the soot from the smoke of the cooking and the inside holds the soot from the food. One of the other traces is attrition, the spalling that occur during the cooking, cleaning, storing and abrading.

The last trace worth studying, the residual traces such as those from oil or fat, salt, wine, organic substance etc. At both sites, many vessels carried traces of bones of animals, for example two vessels – a bowl and a jar – which were found at the Sheikhi Choli vaulted tomb were used to hold offerings as a sacrifice in the burial rituals. The traces of fats from the meats were visible inside the vessels which also explained the dark brown colorization.

The fabric, form and function are related and determined each other, as this example shows about the wares:

Ware 1: It is a very coarse fabric which has more mineral and a little amount of organic temper, which was used to just give plasticity to the clay and to help to form the intend vessels easily. This ware is only suitable to fabricate big jars and basins, and have a big size with thick walls. These were used for storage, like jars and washing such as basin. In the other hand this fabric is not suitable to create the small jars and goblets because of the big coarse mineral temper.

Ware 2: This kind of ware shows an equal percentage of mineral and organic temper. It is suitable to fabricate bowls, plates, jars and pot stands, but it is not good for creating big storage jars because the organic inclusions give a higher permeability to the vessel. The advantage of this ware is that it is not very heavy and it is suitable for transporting. On the other hand, this ware is not suitable for forming goblets because those require a thin wall and smoothing on both surfaces. For the fabrication of plates this ware was perfectly suitable as well.

Ware 3: The tempering of the ware is mainly organic, but also a small amount of mineral inclusions and grog could be observed. Only two forms could be created

[351] SKIBO 2015, 190-196

from this ware, which were the medium sized jars and the bowls. These vessels were mainly used for serving and for long- and short-term storage, as well as transportation.

Ware 4: This ware was the typical material for the cooking pots, so it had to have a big amount of mineral temper, and just a small amount of the organic, to give the clay plasticity and to reduce the permeability. Also, for this reason, both surfaces were burnished. For the cooking function the vessel required an open orifice to access the content and the form of the rim required to be everted to help pouring the contents out. The upper part of the cooking pot is always thicker than the lower part, to give the strength to the structure, and the thin part makes the heating of the contents more easily. This form also required to have a round base.

Ware 5: This ware had a big amount of mineral inclusions, and it seems quite similar to ware 4 but was mainly used for storing liquids, such as water, wine, oil and milk, for the quality of the temper helped reducing the permeability.

Ware 6: A big amount of mineral and a small amount of organic inclusions are presented in this ware. In the meantime, it is suitable to fabricate only the carinated bowls with thin wall, which means, it served as an eating or drinking vessel. No jars of cooking-pot could have been created using this technique.

Ware 7: Mainly goblets and small jars were formed using this material, and the vessels were used as drinking or serving pieces. The clay had to be clean, and fine, for thin walls had to be created from them. In contrast, this ware was not suitable to fabricate any other kind of forms, for example storage jars.

Ware 8: This ware was fine and the potter used it to fabricate the small bowls and plates. Furthermore, the potter glazed this kind of ware to be more usable for people from high social ranks.

Ware 9: This ware required medium amount of mineral and organic temper which is suitable to form medium fine ware and to fabricate strainers, small jars and bowls.

Ware 10: Ware 10 presents a medium quantity of temper. It is specialized to form the transporting jars, small tripods, serving jars and small bowls.

In conclusion, as a result, there is a significant connection between the function, form and fabric. (Diagram 1)

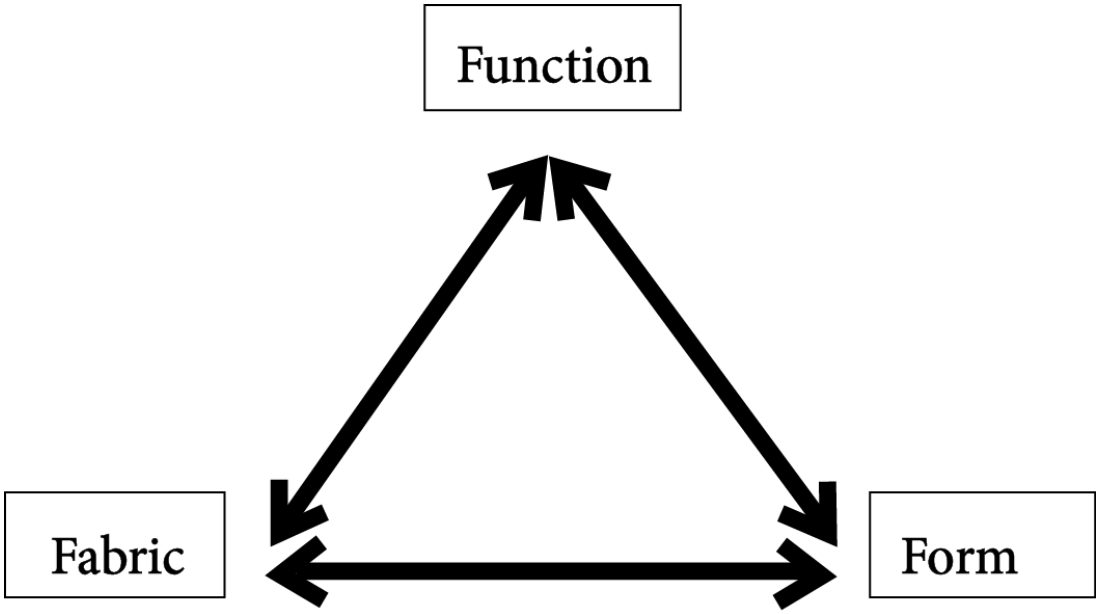


Diagram.1: Relation of the fabric, form and function

During our research, the study has been able to identify the most used methods from Kilik Mishik and the Sheikhi Choli vaulted tomb as well. The potters used many techniques to manufacture the vessels; throwing by the wheel, coiling, slab building, and pinching were all used at both sites. However, we do not see the use of secondary methods such as the drawing and beating.

The potters tried to use several surface treatment methods, such as burnishing, smoothing, gazing, planning and scraping, but interestingly, the polishing and slipping was missing at both sites.

It should also be considered that only one kiln has been found at Kilik Mishik so far, and it has not been preserved well. Unfortunately, there is a lack of information about the particular architecture of the firing structure. Perhaps in the proceeding excavations at Kilik Mishik, new information about the structure of the kilns that were used in this region will be exposed.

The studied sherds have provided enough information about the circumstances of the firing process; the oxidizing, uncompleted oxidizing and reducing atmosphere. Most of the sherds at both sites were fired in open kilns or in an oxidizing atmosphere. This is based on the examination of the section and surface of the sherds.

The texture of the sherds was classified into three groups; the coarse, medium and fine wares. Most of the sherds from both sites have a medium fabric with about 1-5% mineral and 1-7% organic inclusions.

The final process of the firing is characterized by the temperature of the atmosphere. The three main classes are high, medium and low temperature. It seems clear that most of the sherds from both sides were fired under 900 °C, which only means a medium level.

A technological study was carried out as well, looking at forming techniques which were employed at Tell Kilik Mishik and the Sheikhi Choli tomb. The ceramics showed that the most popular techniques were the coiling and wheel throwing methods. During the research it could be observed, that both techniques were used simultaneously, though wheel throwing was more widespread.

Many scholars, such as Pfälzner and Duistermaat, have studied the Middle Assyrian ceramics. They had different ideas about the forming techniques used; Pfälzner thought they used coiling firstly and then shaped it with a slow wheel.[352] Duistermaat, on the contrary, though that for the manufacturing of the amount required for the whole empire the coiling and slow when technique could not be enough, and was not economically positive for the potters.[353] After this research it seems that in the production of the Middle Assyrian ceramics coils and slow wheel-thrown methods were used more than scholars had previously thought. During the Middle Assyrian period, this technique was used more than in the later, Neo-Assyrian era.

The Neo-Assyrian ceramics have been extensively studied by many scholars such as Kreppner, etc. He observed that the coiling method was often used on the large vessels at Tell Sheikh Hamad in northern Syria.[354] As Kreppner observed, this technique was used for larger vessels and based on the authors observations of the manufacturing, this seems true in the case of the basins, big jars, and pot-stands.

[352] PFÄLZNER 1995, 244-245.
[353] DUISTERMAAT 2008, 375-383
[354] KREPPNER 2006, 97.

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Volume II

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Abbreviations

Firing process:

1- **SU**: overcooked
2- **M**: medium
3- **SO**: undercooked

Mark of burning:

1- **O**: oxidizing
2- **So**: semi-oxidizing
3- **R**: reducing

Temperature levels:

1- **H**: high
2- **M**: medium
3- **L**: low

Colour keys

No	Paste Color	Codes	Surface Color	Codes
1.	Black	**P1**	Black	**S1**
2.	Brown	**P2**	Brown	**S2**
3.	Brownish yellow	**P3**	Brownish yellow	**S3**
4.	Dark reddish brown	**P4**	Dark reddish brown	**S4**
5.	Greenish grey	**P5**	Grey	**S5**
6.	grey	**P6**	Greyish green	**S6**
7.	Light brown	**P7**	Light brown	**S7**
8.	Light brownish grey	**P8**	Light brown grey	**S8**
9.	Light grey	**P9**	Light grey	**S9**
10	Light olive grey	**P10**	Light olive grey	**S10**
11	Light red	**P11**	Light red	**S11**
12	Light yellow	**P12**	Light reddish brown	**S12**
13	Light yellowish brown	**P13**	Light yellow	**S13**
14	olive	**P14**	Olive grey	**S14**
15	Olive grey	**P15**	Olive yellow	**S15**
16	Olive yellow	**P16**	Pale yellow	**S16**
17	Pale yellow	**P17**	Pink	**S17**
18	Pink	**P18**	Red	**S18**
19	Red	**P19**	Reddish brown	**S19**
20	Reddish brown	**P20**	Reddish yellow	**S20**
21	Reddish grey	**P21**	Very pale brown	**S21**
22	Reddish yellow	**P22**	Yellow	**S22**
23	Very pale brown	**P23**	Yellowish brown	**S23**
24	Yellow	**p24**	Yellowish red	**S24**
25	Yellowish red	**P25**	Very pale yellow	**S25**
26	Very pale yellow	**P26**	OLIVE	**S26**
27	White	**P27**	Brilliant yellow green	**S27**
28	Greyish brown	**P28**	Dark orange yellow	**S28**
29	Pale olive	**P29**	Moderate orange yellow	**S29**
30			Pale olive	**S30**
31			Strong brown	**S31**
32			Strong yellow	**S32**
33			Brownish yellow	**S33**
34			light yellowish green	**S34**

The other keys

The middles Assyrian pottery keys

No	Rims' typology	Types	Bases' typology	Types
1.	Bevelled	1000	Concaves	2000
2.	Angular folded	1001	Disks	2001
3.	Flaring everted	1002	Disk concaves	2002
4.	Horizontal folded	1003	Flats	2003
5.	Protruding	1004	Flattened	2004
6.	Round	1005	Knobs	2005
7.	Round folded	1006	Nipples	2006
8.	Round outside	1007	Pointed	2007
9.	Round inside	1008	Rings	2008
10.	Square	1009	Tripods	2009
11.	Square folded	1010	Pedestals	2010
12.	Thickened outside	1011	Rounds	2011
13.	Thinned	1012	Rounds for pot stand	2012
14.	Grooved rim	1013	Squares folded for pot stand	2013

	Jars neck	types	Jars Body	types	Bowls body	types
1-	Concave	3000	Ovoid	4000	Convex	6000
2-	Flaring	3001	Globular	4001	Flaring	6001
3-	Concave haring	3002	Convex	4002	Concave	6002
4-	Cylindrical	3003	Globular	4003	Carinated	6003
5	Concave conical	3004	S shape	4004		
6	Convex conical	3005	Cylindrical	4005		
7	Conical	3006	Conical	4006		
8	Convex	3007				

The Neo-Assyrian pottery keys

No	Rims' typology	Types	Bases' typology	Types
1-	Angular folded	Type 100	Ring	Type 200
2-	Beveled	Type 101	Concave	Type 201
3-	Beveled outside-bent	Type 102	Disk	Type 202
4-	Flaring everted	Type 103	Disk grooved	Type 203
5-	Hammered	Type 104	Rounded	Type 204
6-	Horizontal folded	Type 105	Horizontal folded	Type 205
7-	Protruding	Type 106	Knob	Type 206
8-	Grooved rim	Type 107	Pointed	Type 207
9-	Square folded	Type 108	Flattened	Type 208
10-	Square	Type 109	Everted for pot stands	Type 209
11-	Thickened	Type 110	Beveled for pot stands	Type 210
12-	Thickened outside	Type 111		
13-	Thickened outside and rounded	Type 112		
14-	Thickened inside and outside	Type 113		
15-	Round	Type 114		
16-	Round protruding	Type 115		
17-	Round thinned	Type 116		
18-	Round folded	Type 117		
19-	Round outside	Type 118		
20-	Round thickened	Type 119		
21-	Thinned	Type 120		
22-	Thinned grooved	Type 121		

	Jars neck	types	Jars Body	types	Bowls body	types
1-	Concave	300	Convex	400	Convex	600
2-	Cylindrical	301	Globular	401	Carinated	601
3-	Conical	302	Cylindrical	402	Flaring	602
4-	Concave haring	303	Ovoid	403		

	Pots neck	types	Pots Body	types	Goblets body	types
1-	Concave	700	Globular	800	U shape	500
2-	Without neck	701	Convex	801	Convex	501
3-			Ovoid	802	Flaring	502
4-					Concave	503

Middle Assyrian pottery

1. **Bowls**

These are open vessels with carinated, concave, convex or flaring walls and with different types of rims.

1.1 bowls with carinated wall

1.1.1 Sometimes the part between the bevelled rim and the carinated wall is concave. These are the popular carinated bowls in the Middle Assyrian period. (Plate 1, fig. 1725, 1743) and (plate 3, fig 1696)

1.1.2 Some occasions the walls between the rim and the carinated wall are flaring or straight, attached to a rounded rim, (plate 1, fig 1684, 1699, 1691), (plate 2, fig 62), (plate 2, fig. 105, 2011-37) and (plate 3, fig 1685)

1.1.3 Bowls with carinated and flaring walls and with a round to outside rim. (plate 2, fig. 28)

1.1.4 Bowls with carinated and flaring wall and with a protruding rim. (Plate 2, fig.104)

1.1.5 Bowls with carinated and concave wall with a square folded rim (plate 2, fig. 2011-57)

1.1.6 Bowls with carinated and with concave wall, with a flaring everted rim (plate 1, fig. 1690) and (plate 2, fig 1656)

1.1.7 Bowls with carinated and with concave wall, and with a round folded rim (plate 2, fig.1661**)**

1.2 bowls with concave wall

1.2.1 Bowls with concave wall and with a bevelled rim (plate 3 fig. 22, 26, 32, 1746 and 1769)

1.2.2 Bowls with concave wall and with a horizontal folded rim (plate 2, fig.1657)

1.3 bowls with convex wall

Sometimes the shapes are irregular in both parts of rims and bases

1.3.1 Bowls with convex wall and with a bevelled rim. These are the typical middle Assyrian shapes, which appeared first in the old Assyrian period (plate 4, fig. 29, 31, 1670, 61, 1745 and 1692) and (plate 5, fig. 1698, 1748, 1721, 103 and 1751) and (plate 6, fig. 1664, 1738, 1761 and 1708).

1.3.2 Bowls with convex wall and with an angular folded rim (plate 6, fig. 2011-56)

1.3.3 Bowls with convex wall and with a horizontal folded rim (plate 6, fig. 2011-60 and 2011-66)

1.3.4 Bowls with convex wall and with a round rim (plate 6, fig. 2011-64)

1.3.5 Bowls with convex wall and with a thickened outside rim (plate 6, fig. 2011-61)

1.3.6 Bowls with convex wall and with a protruding rim (plate 6, fig. 1673 and plate 5, fig. 1682)

1.4 Bowls with flaring wall

1.4.1 Bowls with flaring wall and with a bevelled rim (plate 7, fig. 1729, 1732, 1668, 1660, 1694, 1701, 1740, 1731), (plate 8, fig. 1757, 2011-65, 1700, 1659, 1658, 1655, 72) and (plate 9, fig. 1701 and 1737)

1.4.2 Bowls with flaring wall and with a thickened outside rim (plate 9, fig.1693)

1.4.3 Bowls with flaring wall and with a round outside rim (plate 9, fig. 1697)

2. Plates

The second open shape is either flat or with a small height. It was used to serve food or other materials.

2.1.1 Plates with flaring wall

1.1.1.1 Plates with flaring wall and with a bevelled rim (plate 42, fig.1741 and 1667)

2.1.2 Plates with carination wall

1.1.2.1 Plates with carinated wall and with a round rim (plate 10, fig. 1742)

3. Strainers

This open shape is with a lot of holes in it, and was used to separate a liquid from solid pieces.

3.1 Strainers with carination wall

3.1.1 Strainers with carinated wall and with a round rim (plate 10, fig. 2013-04)

3.2 Strainers with convex wall

3.2.1 Strainers with convex wall and with a round rim (plate 10, fig. 2011-79)

4. Pots

The big and open shaped pots have a round body, and were used especially for cocking food.

4.1 Pots with concave neck and with a round outside rim (plate 11, 2011-28)

5. Goblets

These were used as cups with small rim diameter and with a thin wall.

5.1 Goblets with U shape wall

5.1.1 Goblets with U shape wall and with a square rim (plate12, fig. 2011-55)

5.1.2 Goblets with U shape wall and with a round rim (plate 12, fig 2011-76,2011-5 and HM1681)

5.1.3 Goblets with U shape with a protruding rim (plate 12, fig. 2011-77)

5.1.4 Goblets with U shape with a horizontal rim (plate 12, fig. 2011-78)

5.2 Goblets with concave wall

5.2.1 Goblets with concave wall and with a round outside rim (plate 12, fig.2012-01)

5.2.2 Goblets with flaring wall and with a round rim (plate 12, fig. 2011-7 and 2011-8)

6. Jars

Jars defined as closed shapes with a narrow neck and with a small rim diameter. The jars classified in jars without neck (small and big), small jars with neck, jars with S shape and Tripod jars.

6.1 Jars without neck

6.1.1 Big jars without neck and with a bevelled rim (plate 13, fig 2012-07)

6.1.2 Small jars without neck and with a round rim (plate 14, fig 2011-14 and 2011-16)

6.1.3 Big jars without neck and with a horizontal folded rim (plate 14, fig.2011-42)

6.2 Small jars with neck

6.2.1 Small jars with concave neck

6.2.1.1 Small jars with concave neck and with a bevelled rim (plate 15, fig. HM1716, HM1753, 2011-63, 2011-36, HM1634 and HM1680)

6.2.1.2 Small jars with concave neck and with a round rim (plate 16, fig HM1727, 2011-62 and HM1750) and (plate 49, fig HM1711)

6.2.1.3 Small jars with concave neck and with a round folded rim (plate 16, fig.1756)

6.2.1.4 Small jars with concave neck and with an angular folded rim (plate 16, fig. 2012-03)

6.2.1.5 Small jars with concave neck and with a thinned rim (plate 16, fig 2011-27 and 2013-07)

6.2.1.6 Small jars with concave neck and with a round outside neck (plate 17, fig. HM107)

6.2.2 Small jars with cylindrical neck

6.2.2.1 Small jars with cylindrical neck and with a round folded rim (plate 17, fig. 2011-54, 2011-58)

6.2.2.2 Small jars with cylindrical neck and with a square folded rim (plate 17, fig 2011-59)

6.2.3 Small jars with convex neck

Small jars with convex neck and with a round to outside rim (plate 17, fig. HM147)

6.2.4 Small jars with conical neck

Small jars with conical neck and with a round folded rim (plate 17, fig 2011-59)

6.2.5 Small jars with flaring neck

6.2.5.1 Small jars with flaring neck and with a round rim (plate 18, fig, 2011-9, HM1707, HM1710, HM48 and HM1715)

6.2.5.2 Small jars with flaring neck and with a round outside rim (plate 19, fig.HM1706, HM146, HM152 and 1730) and (plate 20, HM1733, HM1747 and HM1747)

6.2.5.3 Small jars with flaring neck and with a flaring everted rim (plate 20, fig. HM1695) and (plate 21, fig. 2011-03)

6.2.5.4 Small jars with flaring neck and with a bevelled rim (plate 21, fig. HM1735)

6.2.6 Jars with S shape

6.2.6.1 Jars with S shape and with round rim (plate 22, 2012-02)

6.2.6.2 Jars with S shape and with round folded rim (plate 22, HM1674)

6.2.6.3 Jars with S shape and with angular folded rim (plate 22, HM1683)

6.2.6.4 Jars with S shape and with grooved rim (plate 22, fig. HM1709) and (plate 23, fig. HM1755)

6.2.6.5 Jars with S shape and with bevelled rim (plate 23, fig. HM156 and HM1672)

6.2.7 Tripod jars

These are the most important jars that have been found, for these were the first ones unearthed in Mesopotamia where the tripod joins to a small jar. Many bowls have been found with tripods before the Middle Assyrian and after this period, but no jars with tripod bases have been found in Middle Assyrian period before.

6.2.7.1 Tripod jars with grooved rim (plate 24, fig. HM1752, HM1678, HM1677, HM1679 and HM1728)

6.2.7.2. Tripod jars with bevelled rim (plate 24, fig. HM1702)

6.3 Big jars

6.3.1 Big jars with cylindrical neck

Big jars with cylindrical neck and with square folded rim (plate 25, fig. 1767)

6.3.2 Big jars with flaring neck

Big jars with flaring neck and with protruding rim (plate 25, fig.HM114and 1676) (plate 29, fig 2011-34)

6.3.3 Big jars with concave neck

6.3.3.1 Big jars with concave neck and with angular folded (plate 25, fig. 1705) (plate 26, fig, 1745) (plate 27, fig.1759and HM78) (plate 28, fig. 2011-31) (plate 29, fig. 2011-33)

6.3.3.2 Big jars with concave neck and with square folded rim (plate 26, fig. 1675) (plate 27, fig. 2011-35) and (plate 28, fig. 2011-32)

6.3.3.3 Big jars with flaring neck and with round rim (plate 27, fig.1714)

7. Pot stands

Pot stands are defined as a support with flaring or concave wall, and with an upper rim diameter that's smaller than lower rim. The rims are in bevelled or round and sometimes pinched such as the waved base or rim.

7.1 Pot stands with bevelled rims (plate 30, fig. 2011-30 and 2013-01)

7.2 Pot stand with round rim (plate 30, fig 2013-15)

8. Body sherds

These are the part of the vessels that are carried different decoration and an important diagnostic sherds for determine the decorations. At both sites several body sherds have been discovered but all of them are painted, unfortunately for the middle Assyrian the

incision body sherds haven't found. In the other hand, the complete vessels held different incision decoration which has been studied in chapter IV. In this section we have only painted body sherds and classified based on the pattern of the decorations.

8.1 Triang motifs (plate 31, fig 43-2011, 44-2011 and fig 47-2011).

8.2 Random motif (plate 31, fig.46-2011)

8.3 Horizontal motifs with different amount of bands (plate 31, fig. 45-2011, 48-2011-49-2011, 50-2011, 51-2011, 52-2011 and 53-2011)

9 Bases

Is the lower part of the vessels, some of the base have illustrated with complete vessels and the other bases that have found such a base diagnostic sherds listed below.

9.1 Disk bases (plate 32, fig 69-2011, 02-2011 and 71-2011)

9.2 Round base (plate 32, fig. 67-2011)

9.3 Rig bases (plate 32, fig. 68-2011, 80-2011) and (plate 33, fig 72-2011, 73-2011, 70-2011, 75-2011 and 74-2011)

The typology of the shapes of Neo Assyrian

1. Bowls

As defined before for the middle Assyrian period is in an open vessels shape with carinated, concave, convex or flaring walls and with different types of rim.

1.1 Bowls with convex wall

1.1.1 Bowls with convex wall and with protruding rim (plate 34, fig. 00566, 00544 and 00577)

1.1.2 Bowl with convex wall and with bevelled outside-bent (plate. 37, fig. 2012-146, 2012-148 and 2012-99)

1.1.3 Bowl with convex wall and with hammered rim (plate 35. Fig 00567 and 00626)

1.1.4 Bowl with convex wall and with thickened outside rim (plate 35, fig. 2012-139 and 00547)

1.1.5 Bowls with convex wall and with square folded rim (plate 35, fig. 2012-90, 00401 and 00487 and plate 37. Fig 2010-03)

1.1.6 Bowls with convex wall and with different rim, horizontal rim (plate 36, fig. 00081)

1.1.7 Bowls with convex wall and with beveled rim (plate 36, fig. 2012-85)

1.1.8 Bowls with convex wall and with thickened inside and outside (plate 36, fig. 2012-129)

1.1.9 Bowls with convex wall and with flaring everted rim (plate 36, fig. 00218).

1.1.10 Bowls with convex wall and with thinned rim (plate 36, fig. 2012-133).

1.1.11 Bowls with convex wall and with thinned grooved rim (plate 36. fig 00635),

1.1.12 Bowls with convex wall and with round rim (plate. 34, fig 00066)

1.2 Bowls with carinated wall

1.2.1 Bowl with carinated wall and with round thickened rim (plate. 38 fig. 00221 and 00608),

1.2.2 Bowl with carination wall and with horizontal folded rim (plate.38, fig, 00486 and 00726)

1.2.3 Bowl with carination wall and with thickened outside and rounded (plate 38, fig 2012-132)

1.2.4 Bowl with carinated wall and with thickened outside rim (plate 38, fig. 2012-134)

1.2.5 Bowl with carinated wall and with round thickened outside rim (plate 38, fig 639)

1.2.6 Bowl with carinated wall and with protruding rim (plate 34, 00624 and 00638)

1.3 bowls with flaring wall

1.3.1 Bowls with flaring wall and with protruding rim (plate 39, fig 00154)

1.3.2 Bowls with flaring wall and with inverted rim (plate 39, fig 00560)

1.3.3 Bowls with flaring wall and with round folded (plate 39, fig 592)

1.3.4 Bowls with flaring wall and with thinned rim (plate 39, fig 2012-92)

2. Basins

Are the big open shape vessels with big rim diameter, with a straight, flaring or convex wall and with a thick wall.

2.1 Basin with conical wall and with square rim (plate 40, fig 00346)

2.2 Basin with straight wall and with square rim (plate 40, fig 00152)

3. Strainers

An open shape is with a lot of holes in it for separating a liquid from solid pieces

One unique strainer with carinated wall and with thickened rim (plate 40, fig 00579)

4. Goblets

A container is defined as cups with small rim diameter and with a thin wall.

4.1 Goblets with flaring wall (plate 41, fig. 00642, 00643, 2012-128, 2012-126 and 2012-137)

4.2 Goblets with U shape wall (plate 41. Fig 00596, 00723, 2012-94, 2012-08, 2013-03 and 2012-88)

4.3 Goblets with convex wall (plate 41, fig 00634)

4.4 Goblets with concave wall (plate 8, fig. 00644)

5. Pots

The big and open shape is with round body, especially used for cocking food. Two groups have determined; the pots without neck and with neck.

5.1 pots without neck

5.1.1 Pots without neck and with square folded rims (plate 42 fig. 00153, 00398 and 00047) and (plate 43, fig. 00009)

5.2.2 Pots without neck and with horizontal folded rim (plate 42, fig. 00556) and (plate 43, 00561)

5.2.3 Pots without neck and with round thickened rim (plate 42, fig. 00586) and (plate 43, fig. 00597, 00551)

5.2.4 Pots without neck and with angular folded rim (plate 42, fig, 00663)

5.2.5 Pots without neck and with round rim (plate 42, fig. 00803)

5.2 Pots with concave neck

5.2.1 Pots with concave neck and with protruding rim (plate 44, fig. 00513)

5.2.2. Pots with concave neck and with round thickened rim (plate 44, fig. 00601)

5.2.3 Pots with concave neck and with angular folded rim (plate 44, fig. 00802)

5.2.4 Pots with concave neck and with round thinned rim (plate 44, fig. 2011-82)

5.2.5 Pots with concave neck and with square folded rim (plate 45, fig. 2012-141)

5.2.6 Pots with concave neck and with round protruding rim (plate 45, fig. 2012-97)

5.2.7 Pots with concave neck and with flaring everted rim (plate 45, fig. 2012-96)

6. Jars

Jars defined as closed shapes with a narrow neck and with a small rim diameter. The jars classified in jars without neck and jars with neck.

6.1 jars without neck

6.1.1 Jars without neck and with horizontal folded rim (plate 46, fig 00006, 00054, 00576 and 00645) and (plate 47, fig. 00565)

6.1.2 Jars without neck and with round rim (plate 46, fig. 00050)

6.1.3 Jars without neck and with square folded rim (plate 47, fig. 00550) and (plate 48, fig 00347)

6.1.4 Jars without neck and with bevelled rim (plate 46, fig 2012-87) and (plate 48, fig. 2011-11.

6.1.5 Jars without neck and with round thickened (plate 48, fig 00155)

6.2 jars with concave neck

6.2.1 Jars with concave neck and with protruding neck (plate 49, fig. 00219, 00546, 00603, 00618, 00625 and 00512)

6.2.2 Jars with concave neck and with thinned rim (plate 49, fig. 00040 and 00549)

6.2.3 Jars with concave neck and with round rim (plate 50, fig. 00216, 00552 and 00801)

6.2.4 jars with concave neck and with grooved rim (plate 50, fig. 2012-89 and 2012-95)

6.2.5 jars with concave neck and with horizontal folded (plate 50, fig. 00059 and 2012-135)

6.2.6 Jars with concave neck and with thickened rim (plate 51, fig. 00655)

6.2.7 Jars with concave neck and with ribbon rim (plate 51, fig. 2012-131)

6.2.8 Jars with concave neck and with round folded rim (plate 51, fig. 2012-138)

6.2.9 Jars with concave neck and with thickened outside and rounded rim (plate 51, fig. 2012-142)

6.2.10 jars with concave neck and with square folded rim (plate 51, 2012-83, 2012-143 and 2012-144)

6.2.11 jars with concave neck and with bevelled rim (plate 52, fig. 00220, 00403, 00404, 00641 and 00800)

6.2.12 jars with concave neck and with flaring everted rim (plate 52, fig. 00032, 00223 and 00647)

6.2.13 jars with concave neck and with angular folded rim (plate 53, fig. 00052, 00559, 0585 and 2012-147)

6.3 jars with concave haring

6.3.1 Jars with concave haring neck and with flaring everted rim (plate 53, fig. 00646)

6.3.2 Jars with concave haring neck and with square folded rim (plate 53, fig. 00665)

6.4 jars with conical neck

6.4.1 Jars with conical neck and with horizontal folded rim (plate 54, fig 00150, 00562, 00564 and 600)

6.4.2 Jars with conical neck and with protruding rim (plate 54, fig 00581 and 2012-84)

6.4.3 Jars with conical neck and with rounded folded rim (plate 54, fig 2012-145)

6.5 jars with cylindrical neck

6.5.1 Jars with cylindrical neck and with horizontal folded rim (plate 55, fig 00578 and 00583)

6.5.2 Jars with cylindrical neck and with square folded rim (plate 55, fig 00399)

6.5.3 Jars with cylindrical neck and with protruding rim (plate 55, fig 00545 and 00080)

6.5.4 Jars with cylindrical neck and with grooved rim (plate 56, fig 2012-93 and 2012-10)

6.5.5 Jars with cylindrical neck and with thickened rim (plate 56, 2012-136)

6.5.6 Jars with cylindrical neck and with flaring everted rim (plate 56, fig 2012-140)

7. Pot stands

Pot stands are defined as a support with flaring or concave wall, and with an upper rim diameter that's smaller than lower rim. The rims are in bevelled or round and sometimes pinched such as the waved base or rim.

7.1 pot stand with concave wall

7.1.1 Pot stand with concave wall and with round rim (plate 57, fig 00409 and 00607)

7.1.2 Pot stand with concave wall and with bevelled rim (plate 57, fig 2011-81 and plate 58, fig 2011-29)

7.1.3 Pot stand with concave wall and with round outside rim (plate 59, fig 00584)

7.1.4 Pot stand with concave wall and with round rim (plate 59, fig.00598)

7.2 pot stand with flaring wall

Pot stand with flaring wall and with angular folded rim (plate 58, fig. 2010-1a)

8. Body sherds

These are the part of the vessels that are carried different decoration and an important diagnostic sherds for determine the decorations. At Kilik Mishik several body sherds have been discovered but all of them are painted, hopefully, for the Neo-Assyrian the incision body sherds present more than the middle Assyrian period. In the other hand, the complete vessels held different incision decoration which has been studied in chapter IV. In this section we have only different body sherds and classified based on the pattern of the decorations.

8.1 body sherds with incised decoration

8.1.1 Body sherds with incised decoration and with small circles (plate 60, fig.2012-150)

8.1.2 Body sherds with incised waved lines (plate 60, fig. 2012-119)

8.1.3 Body sherds with incised lines and with nail decoration (plate 60, fig. 2012-100 and 2012-117)

8.1.4 Body sherds with incised waved and horizontal lines (plate 60, fig. 00605, 2012-125. 2012-120, 2012-121, 2012-122 and 2012-118)

8.1.5 Body sherds with incised zigzag and robed decoration (plate 60, fig. 2012-108)

8.2 **Body sherds with painted decoration**

8.2.1 Body sherds with horizontal painted decoration (plate 61, fig. 2012-116, 2012-98, 2012-124, 2012-123 and 00022)

8.2.2 Body sherds with zigzag painted decoration (plat 61, fig. 2012-1b-3)

8.3 Body sherds with applied decoration

Body sherds with applied decoration (plate 61, fig.00604)

9. Bases

Is the lower part of the vessels, some of the base have illustrated with complete vessels and the other bases that have found such a base diagnostic sherds listed below.

9.1 concave base (plate 62, fig. 2012-109, 00017, 2012-113, 2012-112 and 2012-111)

9.2 disk base (plate 62, fig. 2012-114 and 2012-107)

9.3 round bases (plate 62, fig. 2012-102)

9.4 flattened base (plate 62, fig. 00664)

9.5 Grooved disc base (plate 63, 2012-110, 2012-115, 2012-105, 00725, 00580, 00724, 00217 and 00610)

9.6 Knob base (plate 63, fig. 2010-04)

9.7 ring bases (plate 64, fig. 00002, 00141, 2011-41, 00004, and 00029) and (plate 65, fig. 00151, 00222, 00558, 00400, 00402, 00557, 2012-106, 2012-103, 00609, 00630 and 2012-104)

Middle Assyrian pottery Plate 1 carinated bowl

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension	Ware and Remarks	Typology of shapes
HM1725	T	1	1	-	T.p.8	F	Rim diameter: 12 cm Base diameter:6 cm Height: 7 cm Status: complete Comparison:	Firing: SU Color in: P6 Color out: S21 Mark of burning: O Temperature: H	Rim: 1000 Neck:- Body:6000 Base:2002
HM1743	T	1	1	-	T.p.10	H	Rim diameter: 14.5 cm Base diameter:6.5 cm Height: 8 cm Status: complete Comparison:	Firing: SU Color in: - Color out: 21 Mark of burning: O Temperature: H	Rim: 1000 Neck:- Body:6000 Base:2002
HM1684	T	1	1	-	T.p.8	F	Rim diameter: 17.5 cm Base diameter:-7 cm Height: 9 cm Status: complete Comparison: Sabi Abyad (Duistermaat 2007, Fig IV.39.ai).	Firing: SU Color in: P3 Color out: S22 Mark of burning: O Temperature: H	Rim: 1005 Neck:- Body:6000 Base:2008
HM1699	T	1	1	-	T.p.7	E	Rim diameter: 11.5 cm Base diameter:6 cm Height: 7.3 cm Status: complete Comparison:	Firing: SU Color in: P22 Color out: S21 Mark of burning: O Temperature: H	Rim:1005 Neck:- Body:6000 Base:2008
HM1691	T	1	1	-	T.p.10	H	Rim diameter: 12.5 cm Base diameter:5.5 cm Height: 7.5cm Status: complete Comparison:	Firing: M Color in: P24 Color out: S22 Mark of burning: O Temperature: H	Rim: 1005 Neck:- Body:6000 Base:2008
HM1690	T	1	1	-	T.p.10	H	Rim diameter: 11.5 cm Base diameter:4.3 cm Height: 3.5 cm Status: complete Comparison: Sabi Abyad (Duistermaat 2007, Fig. IV.15.I).	Firing: M Color in: P10 Color out: S16 Mark of burning: SO Temperature: M	Rim: 1002 Neck:- Body:6000 Base:2003

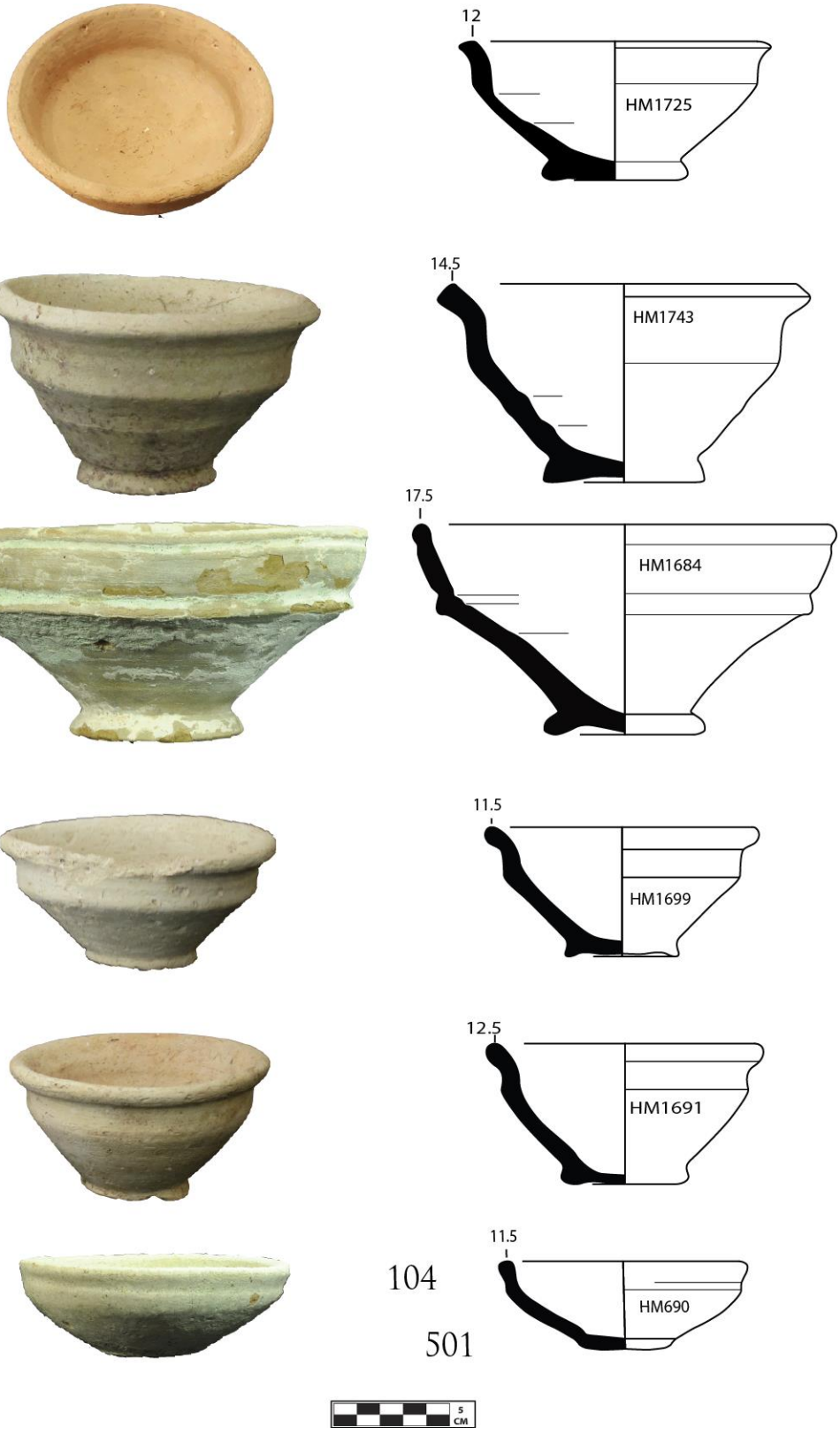

12
HM1725
14.5
HM1743
17.5
HM1684
11.5
HM1699
12.5
HM1691
11.5
HM690
104
501
5 CM

Plate 2 carinated bowl

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension	Ware and Remarks	Typology of shapes
HM105	T	1	1	-	T.p.9	G	Rim diameter: 16.5 cm Base diameter: 6 cm Height: 7.5cm Status: non-complete, glaze Comparaison: Sabi Abyad (Duiterrmatt 2007, fig IV,45.d)	Firing: SU Color in: P24 Color out: S34 Mark of burning: O Temperature: H	Rim: 1005 Neck:- Body:6000 Base: 2002
2011-37	K7	-	-	II-III	T.p.10	H	Rim diameter: 8.5cm Base diameter: 6 cm Height: 5cm Status: complete Comparison:	Firing: M Color in:P17 Color out: S17 Mark of burning: O Temperature: H	Rim: 1005 Neck:- Body:6000 Base: 2008
HM28	T	1	1	-	T. p. 7	E	Rim diameter: 12cm Base diameter:6.5 cm Height: 7.5cm Status: complete, glaze Comparison: Šēh Hamad and Bderi (Pfälzner 1995, Taf.77.n)	Firing: SU Color in: - Color out: S22 Mark of burning: O Temperature: H	Rim: 1007 Neck:- Body:6000 Base: 2000
HM104	T	1	1	-	T.p.3	A3	Rim diameter: 16 cm Base diameter: 7 cm Height: 9.5 cm Status: non-complete Assur Tombs (Hausleiter 2010, Taf. 1, Ass. 1479).	Firing: SO Color in: P21 Color out: S20 Mark of burning: O Temperature: M	Rim: 1004 Neck:- Body:6000 Base: 2010
HM62	T	1	1	-	T.p.7	E	Rim diameter: 14cm Base diameter: 4cm Height: 7 cm Status: non-complete, glaze Comparaison: Sabi Abyad (Duiterrmatt 2007, fig IV,43-d)	Firing: SU Color in: P- Color out: S5 Mark of burning: O Temperature: H	Rim: 1005 Neck:- Body:6000 Base: 2008
2011-57	K7	-	-	IA	T.p.9	G	Rim diameter: 12cm Base diameter: - Height: - Status: rim Comparison:	Firing: M Color in: P24 Color out: S7 Mark of burning: O Temperature: H	Rim: 1010 Neck:- Body:6000 Base: -
HM1656	T	1	1	-	T.p.10	H	Rim diameter: 13 Base diameter:5.5 cm Height: 7cm Status: complete Comparison: Hamad and Bderi, (Pfälzner 1995, Taf. 77.A).	Firing: M Color in: P18 Color out: S17 Mark of burning: O Temperature: H	Rim: 1002 Neck:- Body:6000 Base: 2008
HM1661	T	1	1	-	T.p.7	E	Rim diameter: 11.8cm Base diameter: 5cm Height:7 cm Status: complete Comparison: Sabi Abyad, (Duistermaat 2015, Fig. 7.3.c).	Firing: M Color in: P17 Color out: S16 Mark of burning: O Temperature: H	Rim: 1006 Neck:- Body:6000 Base: 2008


16.5
HM105
8.5
2011-37
12
HM28
16
HM104
14
HM62
12
2011-57
13
HM1656
11.8
HM1661
5
CM

Plate 3 carinated and concave bowl

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension	Ware and Remarks	Typology of shapes
HM1685	T	1	1	-	T.p.7	E	Rim diameter: 16 cm Base diameter: 6 cm Height: 10.5cm Status: complete, glaze Comparaison: Sabi Abyad (Duiterrmatt 2007, fig IV, 37-ar)	Firing: SU Color in: P16 Color out: S27 Mark of burning: O Temperature: H	Rim: 1002 Neck:- Body:6000 Base: 2008
HM1696	T	I	I	-	T.p.10	H	Rim diameter: 12 cm Base diameter: 5 cm Height: 6.5cm Status: complete Comparaison:	Firing: SU Color in:- Color out: S20 Mark of burning: O Temperature: H	Rim: 1000 Neck:- Body:6000 Base: 2002
HM22	T	1	1	-	T. p. 3	A3	Rim diameter: 12.5cm Base diameter:4 cm Height: 6cm Status: complete	Firing: SU Color in: - Color out: S22 Mark of burning: O Temperature: H	Rim: 1000 Neck:- Body:6001 Base: 2000
HM26	T	1	1	-	T.p.3	A3	Rim diameter: 14.5 cm Base diameter: 4cm Height: 6.2 cm Status: complete	Firing: SU Color in: P22 Color out: - Mark of burning: O Temperature: M	Rim: 1000 Neck:- Body:6001 Base: 2002
HM32	T	1	1	-	T.p.3	A3	Rim diameter: 21cm Base diameter: 9cm Height: 6.5 cm Status: complete	Firing: SU Color in: P- Color out: S22 Mark of burning: O Temperature: H	Rim: 1000 Neck:- Body:6001 Base: 2000
HM1746	T	I	I	-	T.p.10	H	Rim diameter: 14.5cm Base diameter: 4.5cm Height: 5cm Status: complete Comparison: Aššur (Pedde 2015, Taf. 108.7)	Firing: SU Color in: P9 Color out: S21 Mark of burning: O Temperature: H	Rim: 1000 Neck:- Body:6001 Base: 2003
HM1769	T	1	1	-	T.p.10	H	Rim diameter: 12.5cm Base diameter: 3cm Height: 4.5cm Status: non-complete	Firing: SU Color in: - Color out: S20 Mark of burning: O Temperature: H	Rim: 1000 Neck:- Body:6001 Base: 2001

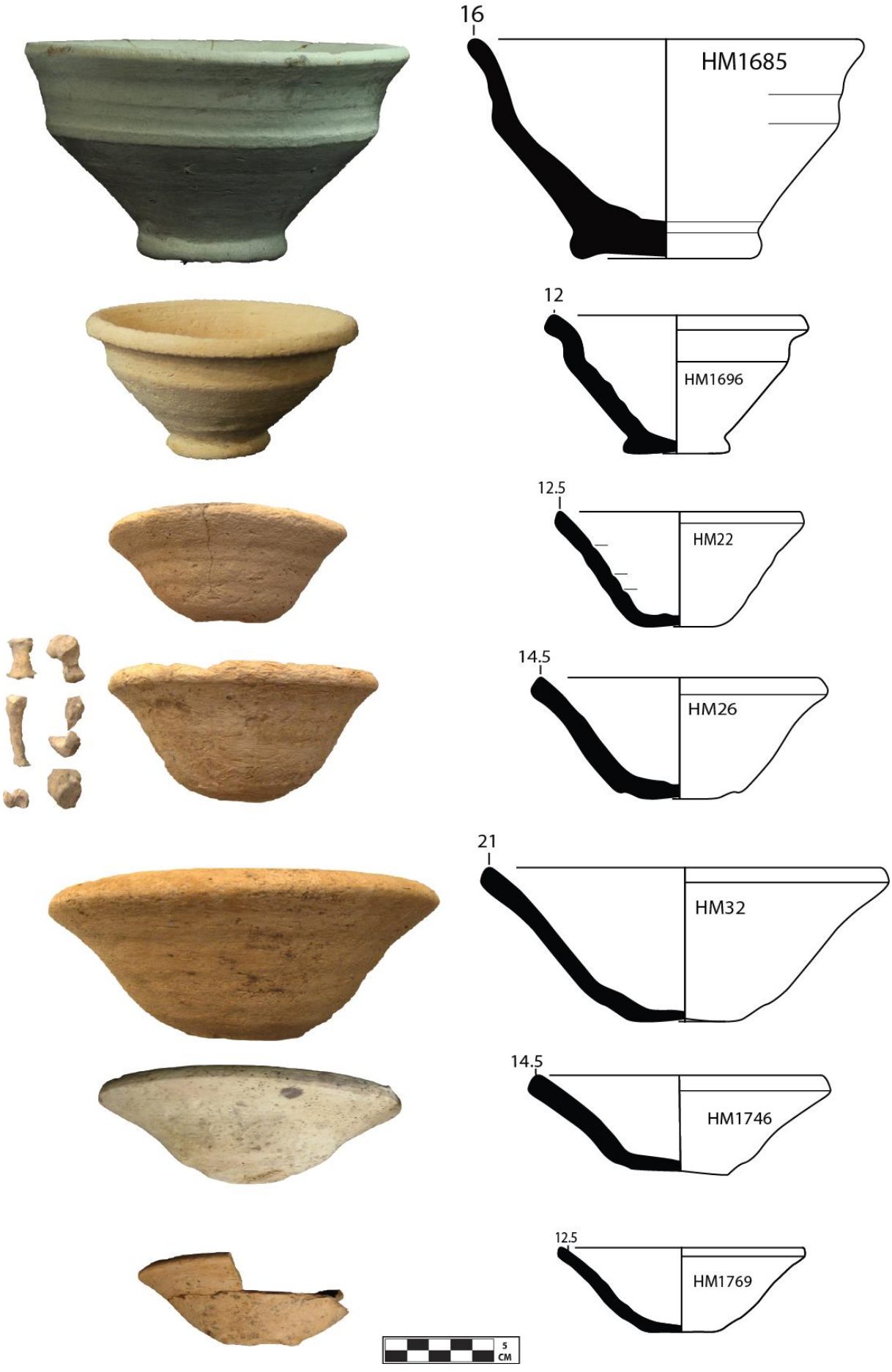

16
HM1685
12
HM1696
12.5
HM22
14.5
HM26
21
HM32
14.5
HM1746
12.5
HM1769
5 CM

Plate 4 bowl with concave wall 1657 and convex wall

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension	Ware and Remarks	Typology of shapes
HM1657	T	1	1	-	T.p.3	A3	Rim diameter: 11 cm Base diameter: 3.4 cm Height: 4cm Status: complete Comparaison: Syrian Jazirah (Pfälzner 2007, Pl. XXX.344).	Firing: M Color in: P18 Color out: S21 Mark of burning: O Temperature: M	Rim: 1003 Neck:- Body:6001 Base: 2001
HM29	T	I	I	-	T.p.10	H	Rim diameter: 17 cm Base diameter: 4 cm Height: 8cm Status: complete Comparison: Assur (Hausleiter 2010, Taf. 1, Ass. 14797.Y)	Firing: SU Color in:- Color out: S16 Mark of burning: O Temperature: H	Rim: 1000 Neck:- Body:6002 Base: 2004
HM31	T	1	1	-	T. p. 10	H	Rim diameter: 16cm Base diameter:4.5 cm Height: 7cm Status: complete Comparison: Assur (Hausleiter 2010, Taf. 1, Ass. 14797.Y)	Firing: M Color in: P24 Color out: S22 Mark of burning: O Temperature: H	Rim: 1000 Neck:- Body:6002 Base: 2000
HM1670	T	1	1	-	T.p.10	H	Rim diameter: 11 cm Base diameter: 3cm Height: 5.5 cm Status: complete Comparison: Assur (Hausleiter 2010, Taf. 1, Ass. 14797.E)	Firing: SU Color in: P24 Color out: S22 Mark of burning: O Temperature: M	Rim: 1000 Neck:- Body:6002 Base: 2001
HM61	T	1	1	-	T.p.10	H	Rim diameter: 9cm Base diameter: 3.5cm Height: 5 cm Status: complete	Firing: SU Color in: P24 Color out: S22 Mark of burning: O Temperature: H	Rim: 1000 Neck:- Body:6002 Base: 2001
HM1745	T	I	I	-	T.p.10	H	Rim diameter: 10cm Base diameter: 2 cm Height: 4.5cm Status: complete	Firing: SU Color in: P16 Color out: S15 Mark of burning: O Temperature: H	Rim: 1000 Neck:- Body:6002 Base: 2004
HM1692	T	1	1	-	T.p.10	H	Rim diameter: 12cm Base diameter: 4cm Height: 7cm Status: complete	Firing: SU Color in: - Color out: S22 Mark of burning: O Temperature: H	Rim: 1000 Neck:- Body:6002 Base: 2003

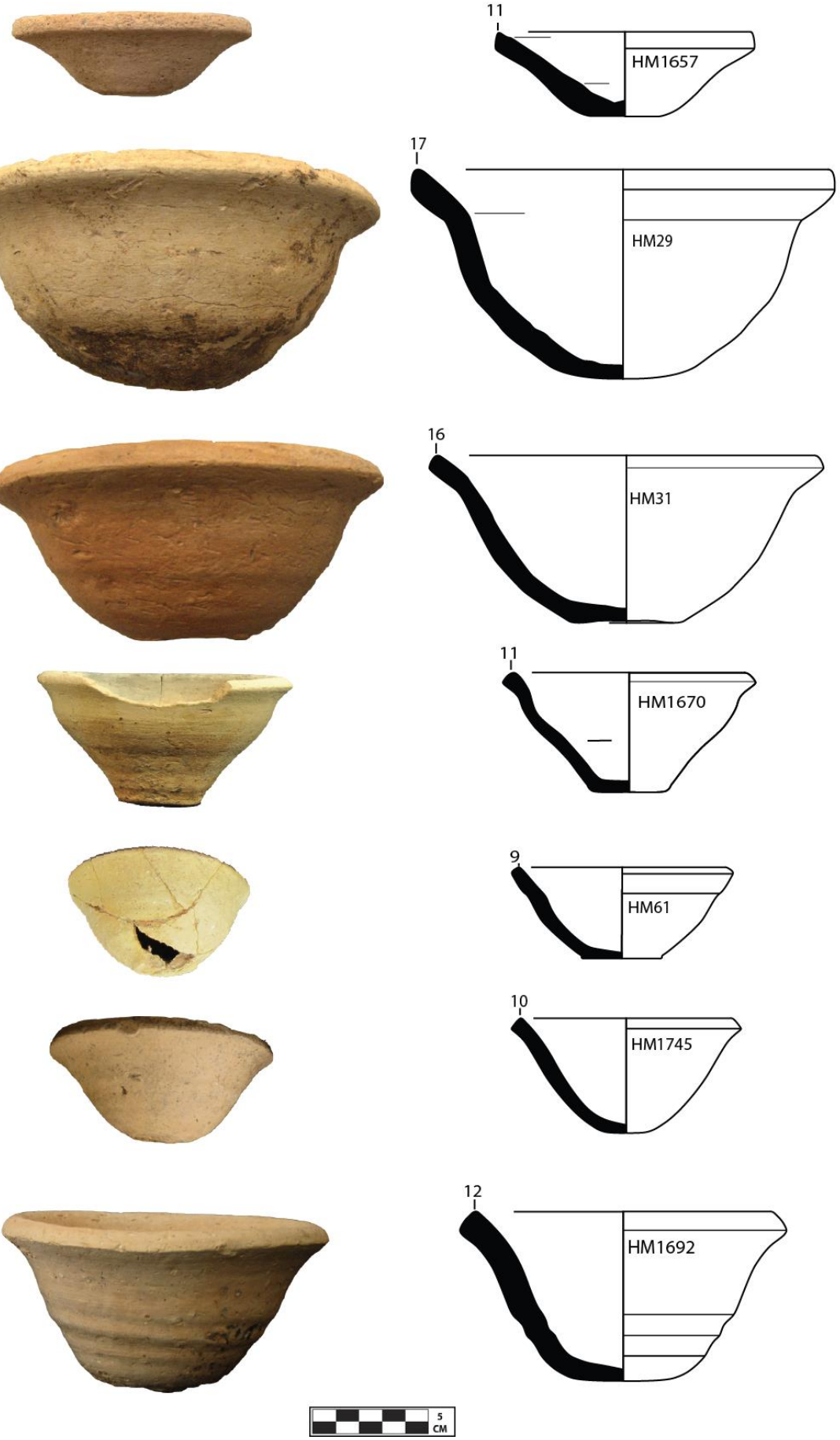
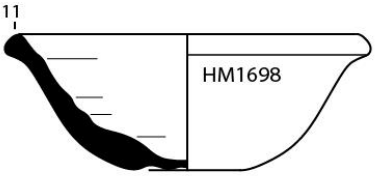

11
HM1657
17
HM29
16
HM31
11
HM1670
9
HM61
10
HM1745
12
HM1692
5
CM

Plate 5 bowl with convex wall

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension	Ware and Remarks	Typology of shapes
HM1698	T	1	1	-	T.p.10	H	Rim diameter: 11 cm Base diameter: 3.8 cm Height: 4.7cm Status: complete Comparison:	Firing: M Color in: - Color out: S21 Mark of burning: O Temperature: M	Rim: 1000 Neck:- Body:6002 Base: 2002
HM1748	T	I	I	-	T.p.10	H	Rim diameter: 17 cm Base diameter: 2 cm Height: 5cm Status: complete Comparison: Assur (Hausleiter 2010, Taf. 1, Ass. 14797.Y)	Firing: SU Color in:- Color out: S21 Mark of burning: O Temperature: H	Rim: 1000 Neck:- Body:6002 Base: 2004
HM1721	T	1	1	-	T. p. 10	H	Rim diameter: 10cm Base diameter:3.5 cm Height: 6.5cm Status: complete Comparison: Assur (Hausleiter 2010, Taf. 1, Ass. 14797.Y)	Firing: SU Color in: P24 Color out: S22 Mark of burning: O Temperature: H	Rim: 1000 Neck:- Body:6002 Base: 2001
HM103	T	1	1	-	?	?	Rim diameter: 11 cm Base diameter: 2.5cm Height: 7 cm Status: complete Comparison: Assur (Hausleiter 2010, Taf. 1, Ass. 14797.Y)	Firing: SU Color in: - Color out: S22 Mark of burning: O Temperature: M	Rim: 1000 Neck:- Body:6002 Base: 2001
HM1751	T	1	1	-	T.p.10	H	Rim diameter: 10.5 cm Base diameter: 3.5 cm Height: 5.5 cm Status: complete Comparison:	Firing: SU Color in: - Color out: S22 Mark of burning: O Temperature: H	Rim: 1000 Neck:- Body:6002 Base: 2001
HM11682	T	I	I	-	T.p.10	H	Rim diameter: 19cm Base diameter: 13.5 cm Height: 8.5cm Status: complete Comparison: Tell Rimah (Postgate et al. 1997, Pl. 64.613).	Firing: SU Color in: - Color out: S22 Mark of burning: O Temperature: H	Rim: 1004 Neck:- Body:6002 Base: 2008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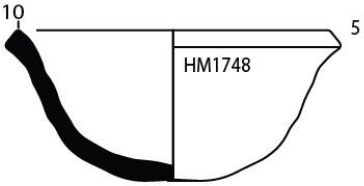
HM1698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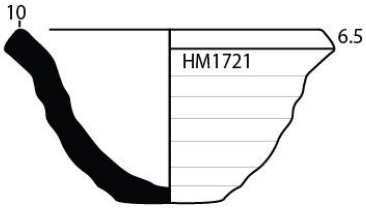
5
HM1748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6.5
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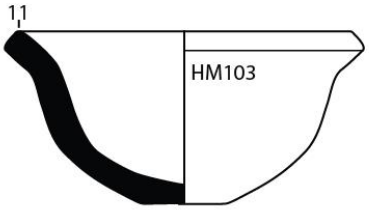
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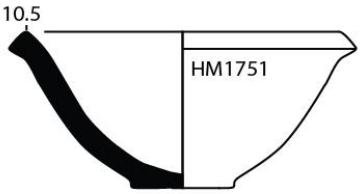
HM103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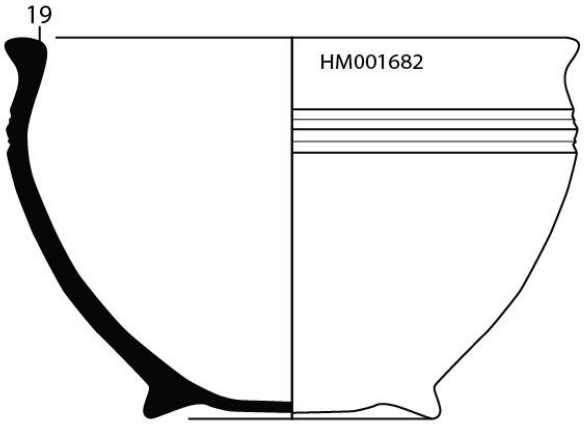
HM1751

112


19
HM001682

503


5
CM

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension	Ware and Remarks	Typology of shapes
HM1664	T	1	1	-	T.p.3	A3	Rim diameter: 12 cm Base diameter: 4cm Height: 4.5cm Status: complete Comparison: Syrian Jazirah (Pfälzner 2007, Pl. XXX.344).	Firing: M Color in: P24 Color out: S22 Mark of burning: O Temperature: M	Rim: 1001 Neck:- Body:6002 Base: 2002
HM1738	T	I	I	-	T.p.10	H	Rim diameter: 10.5 cm Base diameter: 2.5 cm Height: 5.5cm Status: complete Comparison:	Firing: SU Color in:- Color out: S22 Mark of burning: O Temperature: H	Rim: 1005 Neck:- Body:6002 Base: 2001
HM1761	T	1	1	-	T. p. 10	H	Rim diameter: 11cm Base diameter:3.5 cm Height: 5cm Status: complete Comparison:	Firing: SU Color in: - Color out: S22 Mark of burning: O Temperature: H	Rim: 1007 Neck:- Body:6002 Base: 2001
HM1673	T	1	1	-	T. p. 3	A3	Rim diameter: 8.5 cm Base diameter: 3.4 cm Height: 4.3 cm Status: complete Comparison: Šēh Hamad and Bderi (Pfälzner 1995, Taf. 169. h)	Firing: M Color in: P24 Color out: S22 Mark of burning: O Temperature: M	Rim: 1004 Neck:- Body:6002 Base: 2001
2011-60	K7	-	-	IA	T.p.10	H	Rim diameter: 13 cm Base diameter: - Height: - Status: rim Comparison:	Firing: M Color in: P24 Color out: S7 Mark of burning: O Temperature: H	Rim: 1003 Neck:- Body:6002 Base: -
2011-56	K7	-	-	1A	T.p.10	H	Rim diameter: 13cm Base diameter: - Height: - Status: rim Comparison:	Firing: M Color in: P24 Color out: S7 Mark of burning: O Temperature: H	Rim: 1001 Neck:- Body:6002 Base: -
2011-64	K7	-	-	IA	T. p. 10	H	Rim diameter: 10cm Base diameter: - Height: - Status: rim Comparaison: Sabi Abyad (Duiterrmatt 2007, fig IV,101-b)	Firing: SU Color in: P24 Color out: S7 Mark of burning: O Temperature: H	Rim: 1005 Neck:- Body:6002 Base: -
2011-66	K7	-	-	IA	T. p. 10	H	Rim diameter: 17 cm Base diameter: - Height: - Status: rim Comparaison: Sabi Abyad (Duiterrmatt 2007, fig IV,25-d	Firing: M Color in: P24 Color out: S7 Mark of burning: O Temperature: M	Rim: 1003 Neck:- Body:6002 Base: -

HM1708	T	1	1	-	T.p.10	H	Rim diameter: 10 cm Base diameter: 3.5 cm Height: 5 cm Status: complete Comparison:	Firing: SU Color in: P23 Color out: S16 Mark of burning: O Temperature: H	Rim: 1000 Neck:- Body:6002 Base: 2001
2011-61	K7	-	-	IA	T.p.10	H	Rim diameter: 12cm Base diameter: - Height: - Status: rim Comparaison: Sabi Abyad (Duiterrmatt 2007, fig IV,104-c)	Firing: SU Color in: P24 Color out: S7 Mark of burning: O Temperature: H	Rim: 1011 Neck:- Body:6002 Base: 2008

Plate 6 bowl with convex wall

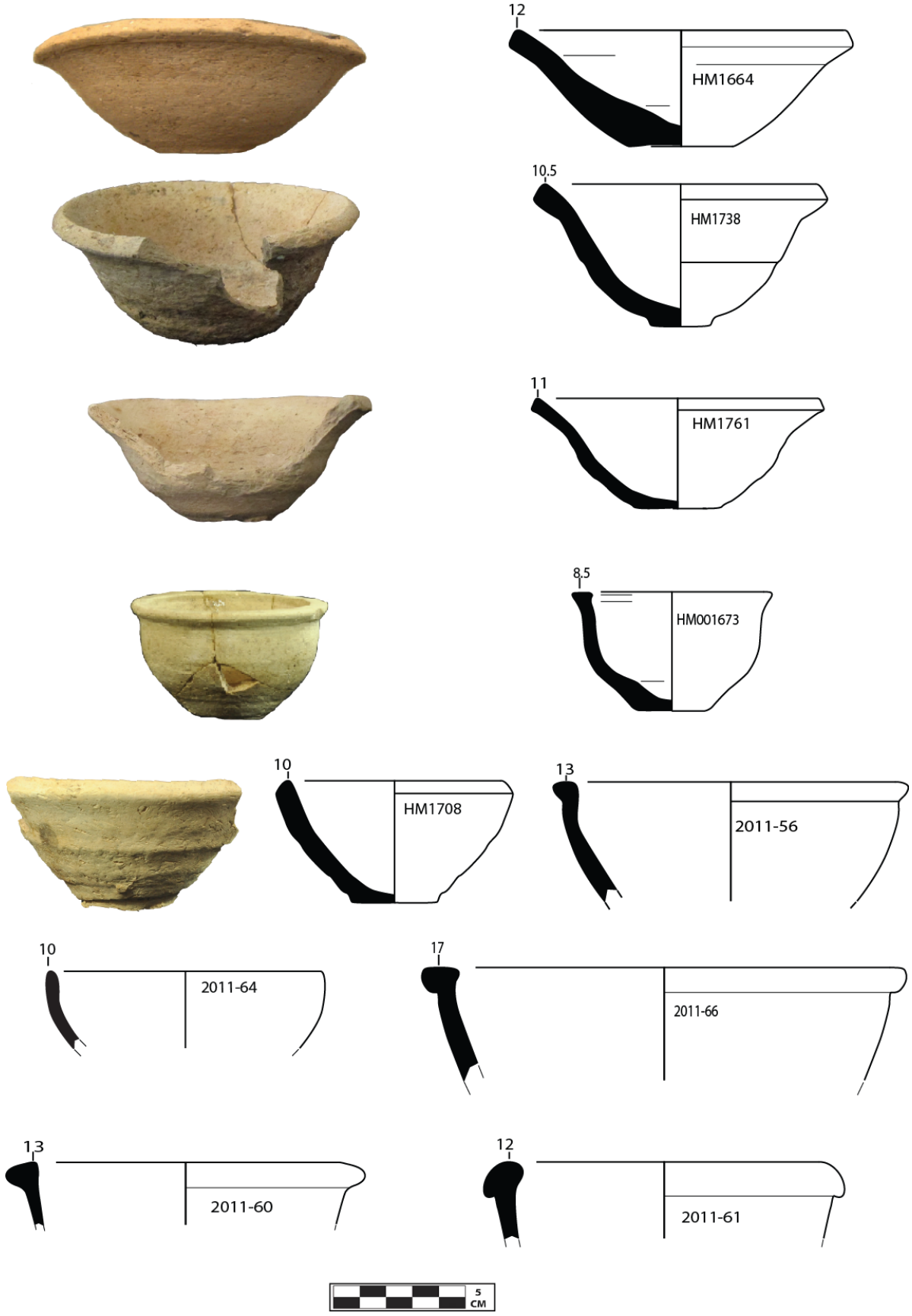
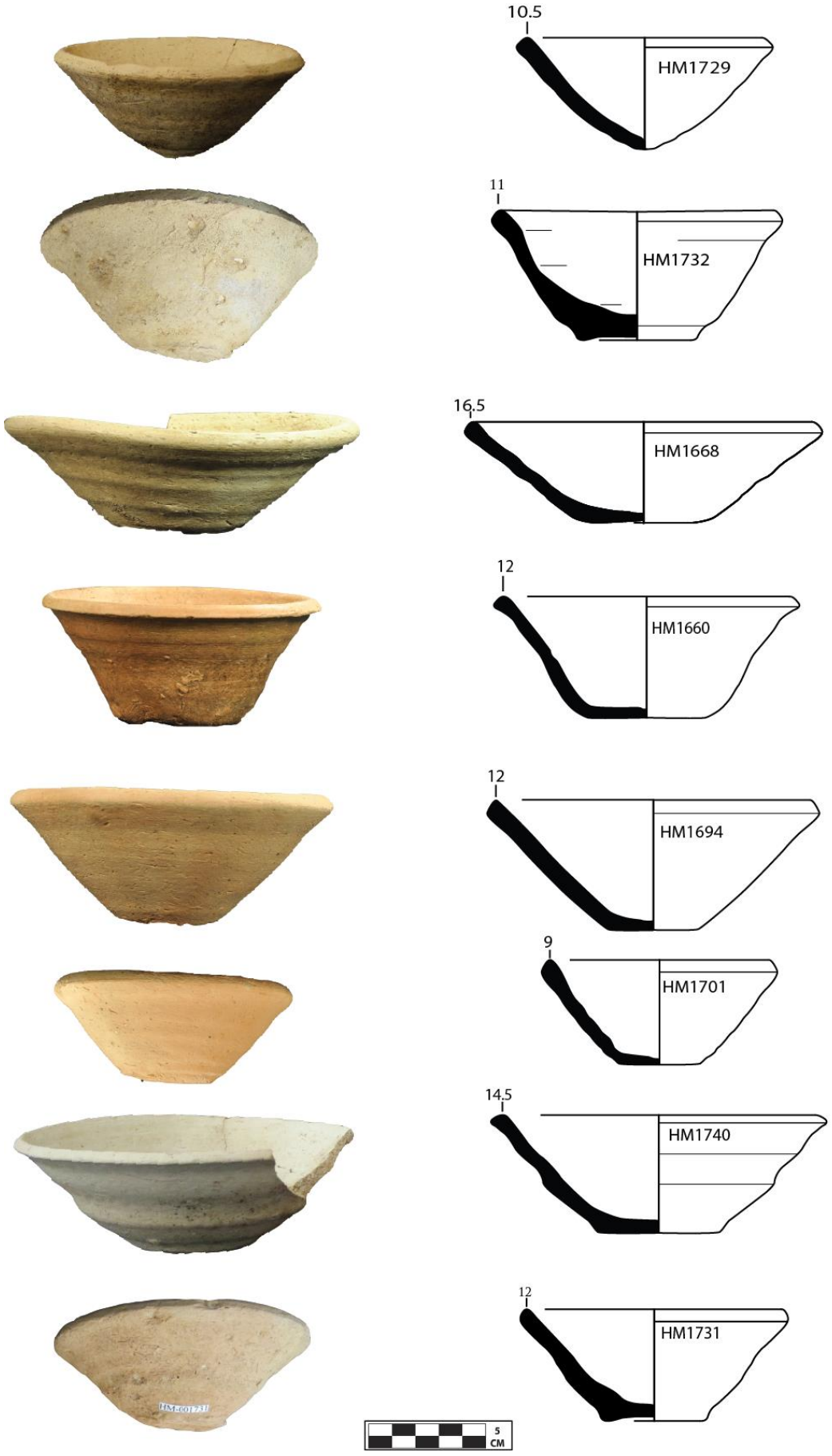

12
HM1664
10.5
HM1738
11
HM1761
8.5
HM001673
10
HM1708
13
2011-56
10
2011-64
17
2011-66
13
2011-60
12
2011-61
5
CM

Plate 7 bowl with flaring wall

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension	Ware and Remarks	Typology of shapes
HM1729	T	1	1	-	T.p.10	H	Rim diameter: 10.5 cm Base diameter: 2.5cm Height: 5.5cm Status: complete	Firing: M Color in: - Color out: S29 Mark of burning: O Temperature: M	Rim: 1000 Neck:- Body:6003 Base: 2000
HM1732	T	I	I	-	T.p.10	H	Rim diameter:11 cm Base diameter: 5 cm Height: 6 cm Status: complete	Firing: M Color in:- Color out: S22 Mark of burning: O Temperature: H	Rim: 1000 Neck:- Body:6003 Base: 2002
HM1668	T	1	1	-	T. p. 10	H	Rim diameter: 16.5cm Base diameter:5 cm Height: 5cm Status: complete	Firing: M Color in: P23 Color out: S22 Mark of burning: O Temperature: H	Rim: 1000 Neck:- Body:6003 Base: 2000
HM1660	T	1	1	-	T. p. 3	A3	Rim diameter: 12 cm Base diameter: 5.5 cm Height: 5 cm Status: complete	Firing: SU Color in: - Color out: S22 Mark of burning: O Temperature: H	Rim: 1000 Neck:- Body:6003 Base: 2001
HM1694	T	1	1	-	T.p.10	H	Rim diameter: 12 cm Base diameter: 4cm Height: 5.5cm Status: complete Comparaison: Sabi Abyad (Duiterrmatt 2007, fig IV,47-L)	Firing: SU Color in: - Color out: S22 Mark of burning: O Temperature: H	Rim: 1000 Neck:- Body:6003 Base: 2001
HM1701	T	1	1	-	T.p.10	H	Rim diameter: 9cm Base diameter: 3cm Height: 4.5 Status: rim	Firing: SU Color in: - Color out: S22 Mark of burning: O Temperature: H	Rim: 1000 Neck:- Body:6003 Base: 2001
HM1740	T	1	1	-	T. p. 10	H	Rim diameter: 10cm Base diameter: 5.5 cm Height: 5cm Status: non-complete Comparaison: Sabi Abyad (Duiterrmatt 2007, fig IV,114-m)	Firing: SU Color in: P17 Color out: S26 Mark of burning: O Temperature: H	Rim: 1000 Neck:- Body:6003 Base: 2001
HM1731	T	1	1	-	T. p. 10	H	Rim diameter: 17 cm Base diameter: - Height: - Status: complete	Firing: SU Color in: - Color out: S21 Mark of burning: O Temperature: M	Rim: 1000 Neck:- Body:6003 Base: 2001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HM1729
11
HM1732
16.5
HM1668
12
HM1660
12
HM1694
9
HM1701
14.5
HM1740
12
HM1731
5
CM

Plate 8 bowl with flaring wall

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension	Ware and Remarks	Typology of shapes
HM1757	T	1	1	-	T.p.9	G	Rim diameter:11 cm Base diameter: 3cm Height: 5cm Status: complete	Firing: SU Color in: - Color out: S22 Mark of burning: O Temperature: M	Rim: 1000 Neck:- Body:6003 Base: 2001
2011-65	K7	-	-	-	T.p.10	H	Rim diameter:16 cm Base diameter: - Height: - Status: rim	Firing: M Color in:P24 Color out: S7 Mark of burning: O Temperature: H	Rim: 1000 Neck:- Body:6003 Base: -
HM1700	T	1	1	-	T. p. 3	A3	Rim diameter: 10.5cm Base diameter:5 cm Height: 5.5cm Status: complete Comparison: Tell Hawa (Ball and al. 1989, fig. 16,7)	Firing: M Color in: P23 Color out: S22 Mark of burning: O Temperature: H	Rim: 1005 Neck:- Body:6003 Base: 2001
HM1659	T	1	1	-	T. p. 3	A3	Rim diameter: 16 cm Base diameter: 5.5 cm Height: 6 cm Status: complete	Firing: M Color in: P23 Color out: S20 Mark of burning: O Temperature: H	Rim: 1001 Neck:- Body:6003 Base: 2001
HM1658	T	1	1	-	T.p.9	G	Rim diameter: 12.5 cm Base diameter: 2.5cm Height: 5 cm Status: complete	Firing: SU Color in: P23 Color out: S20 Mark of burning: O Temperature: H	Rim: 1001 Neck:- Body:6003 Base: 2000
HM1655	T	1	1	-	T.p.2	A2	Rim diameter: 10.5cm Base diameter: 3cm Height: 6cm Status: rim Comparison: Sabi Abyad (Duistermaat 2007, Fig. IV.100.K.)	Firing: M Color in: P24 Color out: S20 Mark of burning: O Temperature: H	Rim: 1001 Neck:- Body:6003 Base: 2005
HM72	T	1	1	-	T. p. 2	A2	Rim diameter: 13cm Base diameter: 5.5 cm Height: 4cm Status: non-complete	Firing: SU Color in: - Color out: S22 Mark of burning: O Temperature: H	Rim: 1005 Neck:- Body:6003 Base: 2000

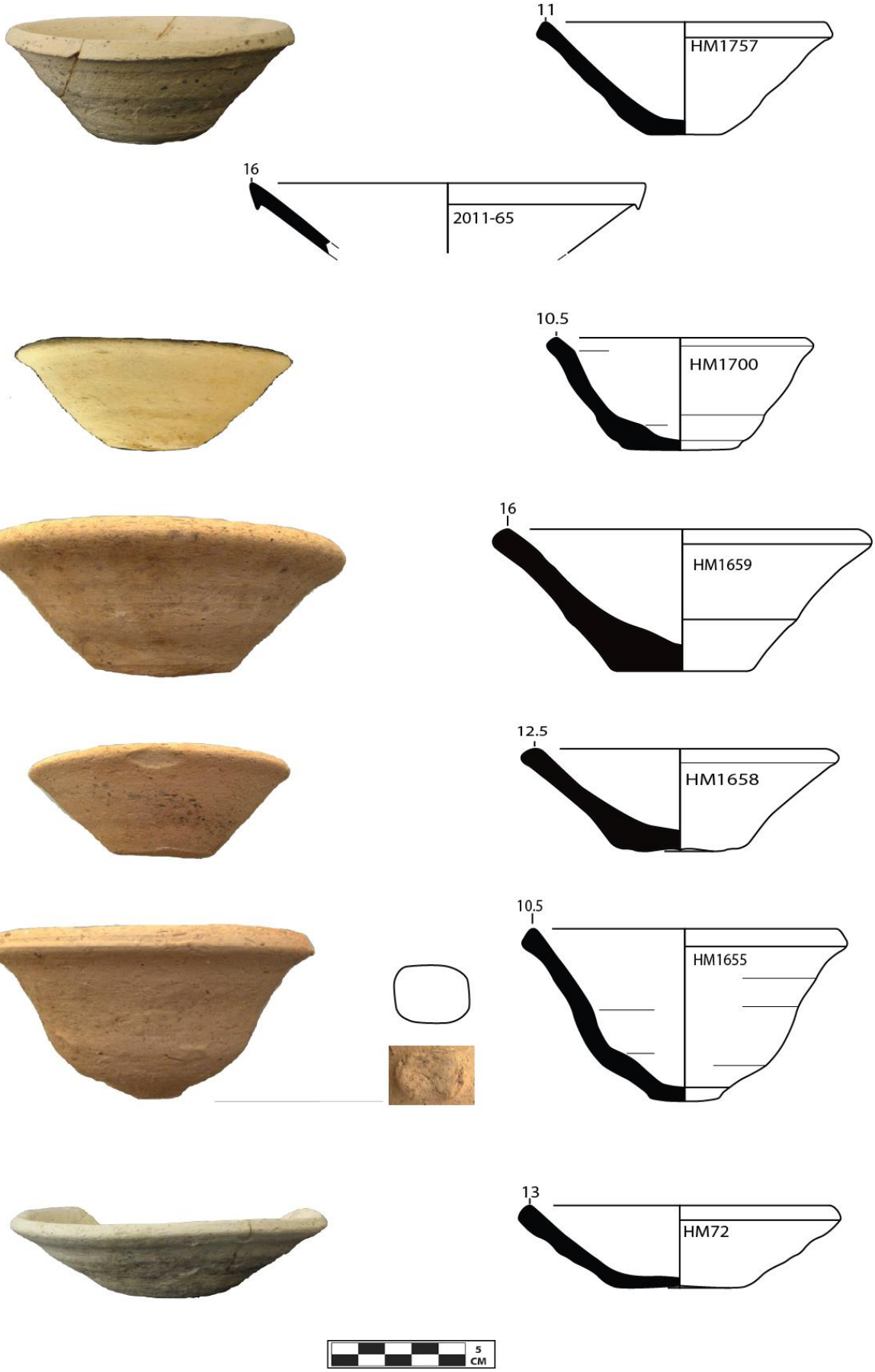
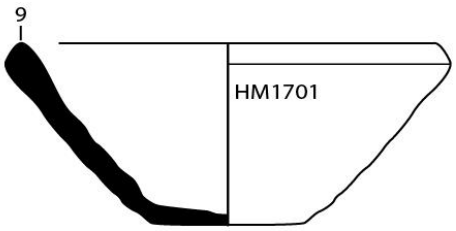
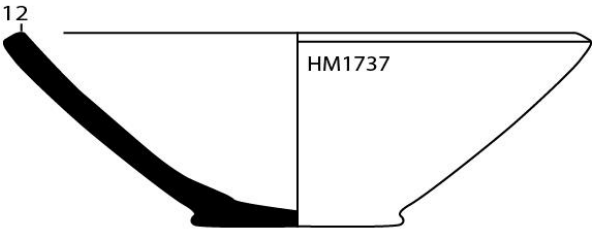
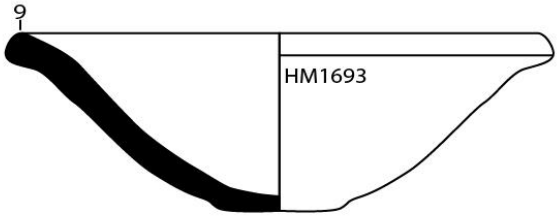

11
HM1757
16
2011-65
10.5
HM1700
16
HM1659
12.5
HM1658
10.5
HM1655
13
HM72
5
CM

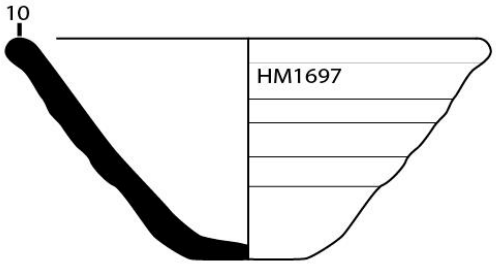
Plate 9 bowl with flaring wall

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension	Ware and Remarks	Typology of shapes
HM1701	T	1	1	-	T.p.9	G	Rim diameter:9 cm Base diameter: 3cm Height: 4.5cm Status: complete	Firing: SU Color in: - Color out: S22 Mark of burning: O Temperature: H	Rim: 1000 Neck:- Body:6003 Base: 2001
HM1737	T	I	I	-	T.p.7	E	Rim diameter:12 cm Base diameter: 4.5cm Height: 5cm Status: complete	Firing: SU Color in:- Color out: S22 Mark of burning: O Temperature: H	Rim: 1005 Neck:- Body:6003 Base: 2001
HM1693	T	1	1	-	T. p. 3	A3	Rim diameter: 9 cm Base diameter:2.5 cm Height: 4cm Status: complete	Firing: SU Color in: - Color out: S16 Mark of burning: O Temperature: H	Rim: 1011 Neck:- Body:6003 Base: 2001
HM1697	T	1	1	-	T. p. 9	G	Rim diameter: 16 cm Base diameter: 2.5 cm Height: 5.5 cm Status: complete	Firing: M Color in: P24 Color out: S22 Mark of burning: O Temperature: H	Rim: 1007 Neck:- Body:6003 Base: 2004


9
HM1701


12
HM1737

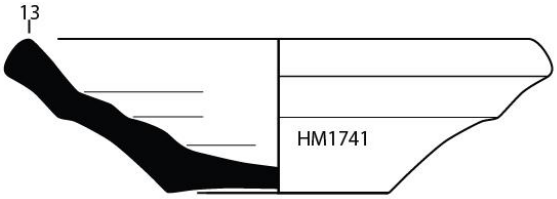

9
HM1693

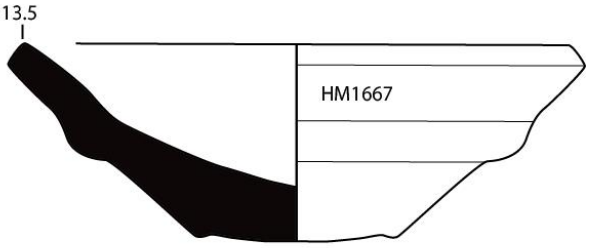

10
HM1697

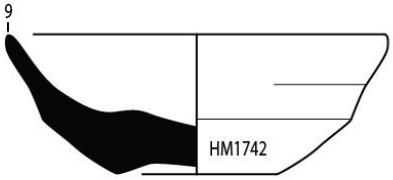

5
CM

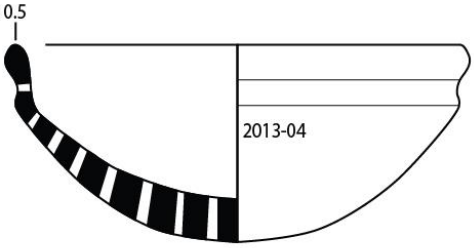
Plate 10 plates and strainers

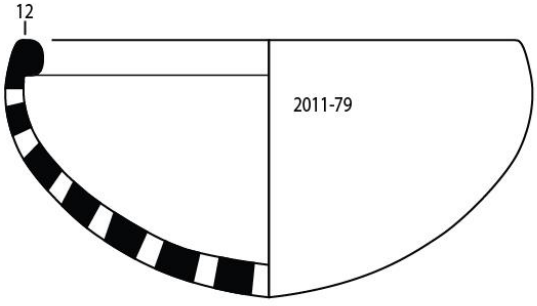
Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension	Ware and Remarks	Typology of shapes
HM1741	T	1	1	-	T.p.2	A2	Rim diameter:13 cm Base diameter: 5.5 cm Height: 3cm Status: complete Comparison: Šēh Hamad and Bderi (Pfälzner 1995, Taf.176.a)	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: 1001 Neck:- Body:6001 Base: 2000
HM1667	T	I	I	-	T.p.2	A2	Rim diameter:13.5 cm Base diameter: 5cm Height: 4.2cm Status: complete Comparison: Neo Assyrian pottery, (Anastasio 2011, plate XX, c.)	Firing: SU Color in:P7 Color out: S7 Mark of burning: O Temperature: H	Rim: 1001 Neck:- Body:6001 Base: 2000
HM1742	T	1	1	-	T. p. 2	A2	Rim diameter: 9 cm Base diameter:4 cm Height: 3cm Status: complete Comparison: Sabi Abyad (Duiterrmatt 2007, fig IV,37-b)	Firing: SU Color in: - Color out: S16 Mark of burning: O Temperature: H	Rim: 1005 Neck:- Body:6003 Base: 2000
2013-04	L7	-	-	II	T. p. 9	G	Rim diameter: 10.5 cm Base diameter: 1cm Height: 4.2 cm Status: complete Comparison:	Firing: SU Color in: P24 Color out: S25 Mark of burning: O Temperature: H	Rim: 1005 Neck:- Body:6003 Base: 2011
2011-79	K2	-	-	II	T. p. 9	G	Rim diameter: 12 cm Base diameter: 1 cm Height: 5.5 cm Status: complete Comparison:	Firing: SU Color in: P24 Color out: S7 Mark of burning: O Temperature: H	Rim: 1008 Neck:- Body:6000 Base: 2011


13
HM1741


13.5
HM1667


9
HM1742


10.5
2013-04


12
2011-79


5
CM

Plate 11 one pot

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension	Ware and Remarks	Typology of shapes
HM1741	K7	-	-	1B	T.p.6	D	Rim diameter: 21 cm Base diameter: 3.5 cm Height: 33cm Status: complete	Firing: SO Color in: P28 Color out: S3 Mark of burning: O Temperature: M	Rim: 1007 Neck:3000 Body:6001 Base: 2011


21
2011-28
5 CM

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension	Ware and Remarks	Typology of shapes
2011-55	K7	-	-	IA	T.p.7	E	Rim diameter:7 cm Base diameter: - Height: - Status: rim	Firing: SU Color in: P24 Color out: S7 Mark of burning: O Temperature: H	Rim: 1009 Neck:- Body:G1 Base: -
2011-76	K7	-	-	IB	T.p.7	E	Rim diameter:10 cm Base diameter: - Height: - Status: rim Comparison: Sabi Abyad (Duistermaat 2007, Fig IV.90.ad).	Firing: SU Color in:P22 Color out: S20 Mark of burning: O Temperature: H	Rim: 1005 Neck:- Body:G1 Base: -
2011-78	K7	-	-	IB	T. p. 7	E	Rim diameter: 7 cm Base diameter:- Height: - Status: rim Comparison: Sabi Abyad (Duistermaat 2007, Fig IV.39.ai).	Firing: SU Color in: P22 Color out: S20 Mark of burning: O Temperature: H	Rim: 1003 Neck:- Body:G1 Base: -
2011-6	K7	-	-	IIA	T. p. 7	E	Rim diameter: - Base diameter: 1cm Height: 4.2 cm Status: non-complete	Firing: SU Color in: P22 Color out: S22 Mark of burning: O Temperature: H	Rim: - Neck:- Body:G1 Base: 2011
2011-5	K7	-	-	IA	T. p. 7	E	Rim diameter: 6 cm Base diameter: 4 cm Height: 6.5 cm Status: complete	Firing: SU Color in: P22 Color out: S20 Mark of burning: O Temperature: H	Rim: 1005 Neck:- Body:- Base: 2001
2011-8	K7	-	-	2B	T.p.7	E	Rim diameter:6 cm Base diameter: 3.5 cm Height: 4.5 cm Status: complete	Firing: SU Color in: P24 Color out: S22 Mark of burning: O Temperature: H	Rim: 1005 Neck:- Body:G3 Base: 2001
2011-7	K7	-	-	2B	T.p.7	E	Rim diameter:6.2 cm Base diameter: 4.5cm Height:5.5 cm Status: complete	Firing: SU Color in:P17 Color out: S16 Mark of burning: O Temperature: H	Rim: 1005 Neck:- Body:G3 Base: 2011
2011-77	K7	-	-	IB	T. p.7	E	Rim diameter: 7 cm Base diameter:- Height: - Status: rim	Firing: SU Color in: - Color out: S16 Mark of burning: O Temperature: H	Rim: 1004 Neck:- Body:G1 Base: -
2012-01	L7	-	-	I	T. p.7	E	Rim diameter:8cm Base diameter: 7.5cm Height: 9.8 cm Status: complete	Firing: SU Color in: P18 Color out: S16 Mark of burning: O Temperature: H	Rim: 1007 Neck:- Body:G2 Base: 2011
HM1681	T	I	I	-	T. p.7	E	Rim diameter: 8 cm Base diameter: 2 cm Height: 9.5 cm Status: complete	Firing: SU Color in: P18 Color out: S22 Mark of burning: O	Rim: 1005 Neck:- Body:G1 Base: 2006

							Comparison: Sabi Abyad, (Duistermaat 2015, Fig. 7.3.c).	Temperature: H	

Plate 12 Goblets

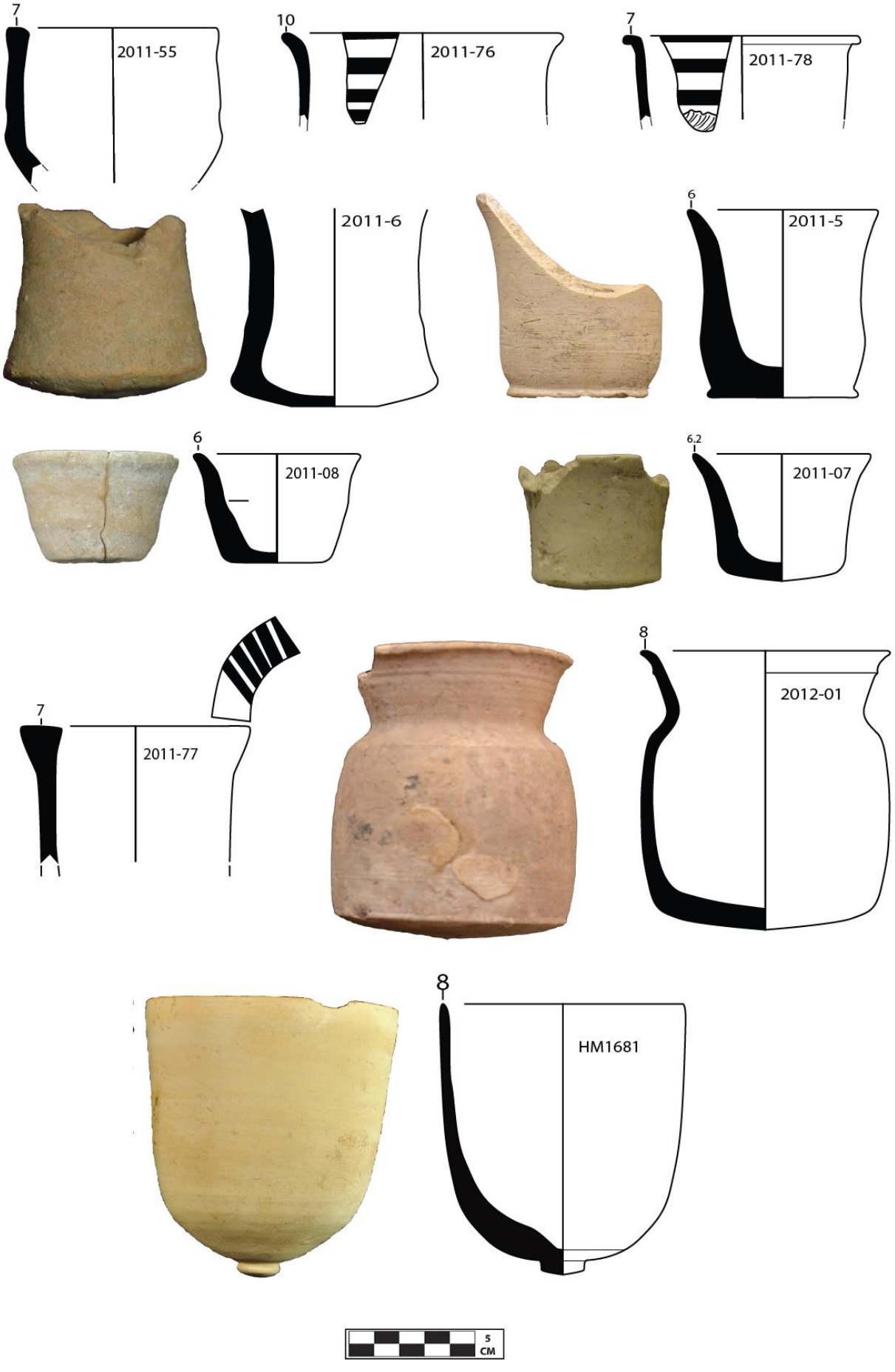

7
2011-55
10
2011-76
7
2011-78
2011-6
6
2011-5
6
2011-08
6,2
2011-07
7
2011-77
8
2012-01
8
HM1681
5
CM

Plate 13 big jar

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension	Ware and Remarks	Typology of shapes
2011-07	L7	-	-	II	T.p.1	A1	Rim diameter:65 cm Base diameter: - Height: 65 Status: non-complete	Firing: M Color in: P24 Color out: S17 Mark of burning: O Temperature: H	Rim: 1000 Neck:- Body:4002 Base: -

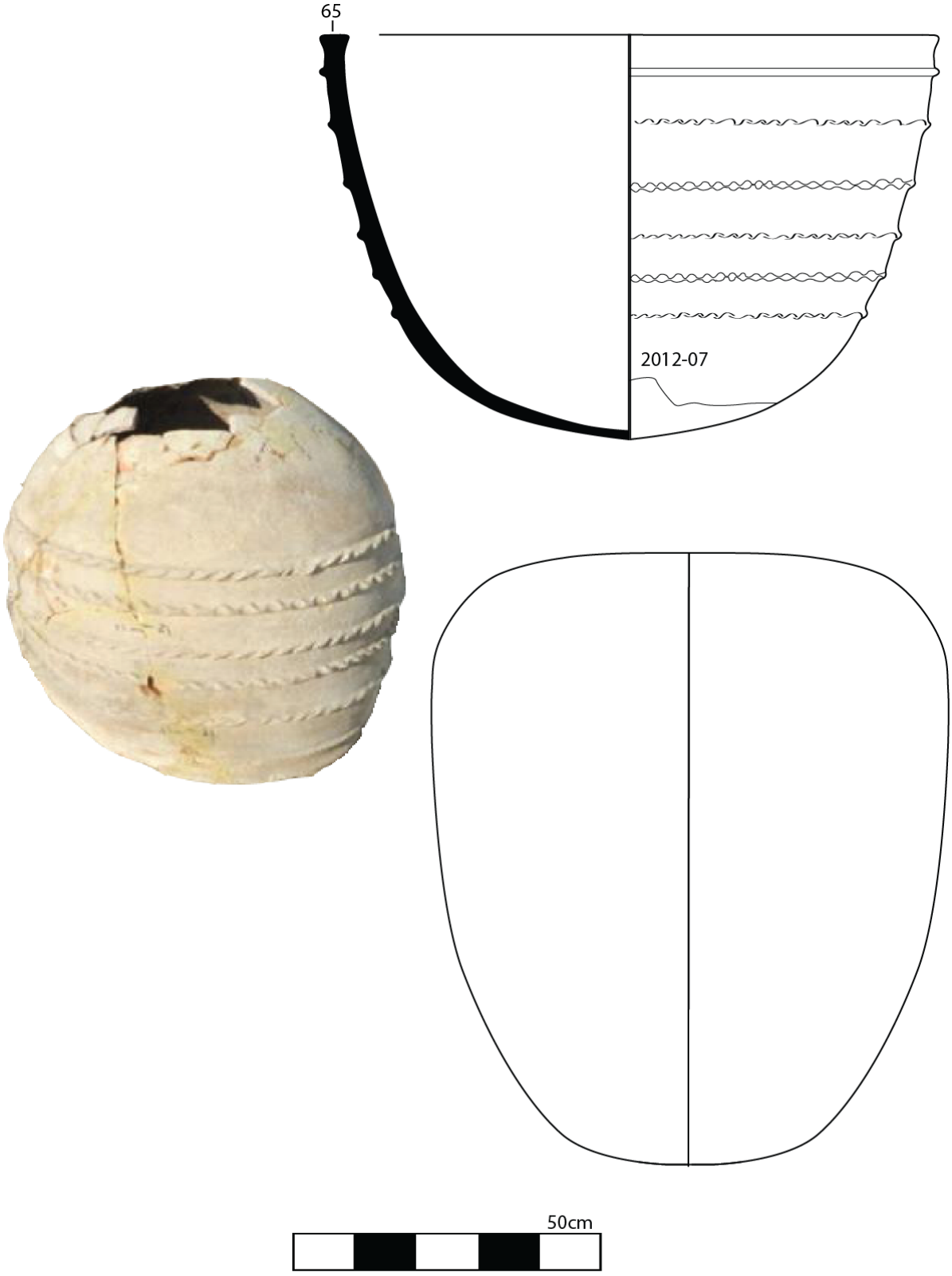

65
2012-07
50cm

Plate 14 jars without neck

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension	Ware and Remarks	Typology of shapes
2011-14	K7	-	-	IB	T.p.7	E	Rim diameter:8 cm Base diameter: - Height: - Status: rim	Firing: SU Color in: P24 Color out: S25 Mark of burning: O Temperature: H	Rim: 1009 Neck:- Body:4002 Base: -
2011-16	K7	-	-	IB	T.p.7	E	Rim diameter:8.8 cm Base diameter: 5cm Height: 11.2cm Status: complete	Firing: SU Color in:P17 Color out: S22 Mark of burning: O Temperature: H	Rim: 1005 Neck:- Body:4003 Base: 2008
2011-42	K7	-	-	IA	T. p. 9	G	Rim diameter: 17 cm Base diameter:10 cm Height: 37 Status: complete	Firing: SU Color in: P23 Color out: S16 Mark of burning: O Temperature: H	Rim: 1003 Neck:- Body:4003 Base: 2003


8
2011-14
8,8
11.2
2011-16
5
5
CM


17
37
2011-42
10

Plate 15 small jars with concave neck

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension	Ware and Remarks	Typology of shapes
HM1753	T	I	I	-	T.p.7	E	Rim diameter:5 cm Base diameter: 1.5cm Height: 95cm Status: complete Comparison: Aššur (Pedde 2015, Taf. 121. 166.6)	Firing: SU Color in: P16 Color out: S20 Mark of burning: O Temperature: H	Rim: 1000 Neck:3000 Body: 4000 Base: 2001
HM1716	T	I	I	-	T.p.7	E	Rim diameter:3 cm Base diameter: 08cm Height: 9.5 cm Status: rim	Firing: SU Color in:- Color out: S22 Mark of burning: O Temperature: H	Rim: 1000 Neck:3000 Body:4001 Base: 2007
2011-63	K7	-	-	IA	T. p. 7	E	Rim diameter: 7 cm Base diameter:- Height: - Status: rim	Firing: SU Color in: P24 Color out: S7 Mark of burning: O Temperature: H	Rim: 1000 Neck:3000 Body:- Base: -
HM1680	T	I	I	-	T. p. 7	E	Rim diameter: 8cm Base diameter: 2.5cm Height: 15 cm Status: complete	Firing: SU Color in: P17 Color out: S16 Mark of burning: O Temperature: H	Rim: 1013 Neck:3000 Body:4003 Base: 2001
2011-36	K7	-	-	IA	T. p. 7	E	Rim diameter: 5 cm Base diameter: 3 cm Height: 7 cm Status: complete	Firing: SU Color in: P17 Color out: S22 Mark of burning: O Temperature: H	Rim: 1000 Neck:3000 Body: 4003 Base: 2000
HM1634	T	I	I	-	T.p.7	E	Rim diameter:9 cm Base diameter: 2 cm Height: 18 cm Status: complete Comparison: Aššur (Pedde 2015, Taf. 1.155.2)	Firing: SU Color in: P18 Color out: S20 Mark of burning: O Temperature: H	Rim: 1013 Neck:3000 Body:4000 Base: 2005

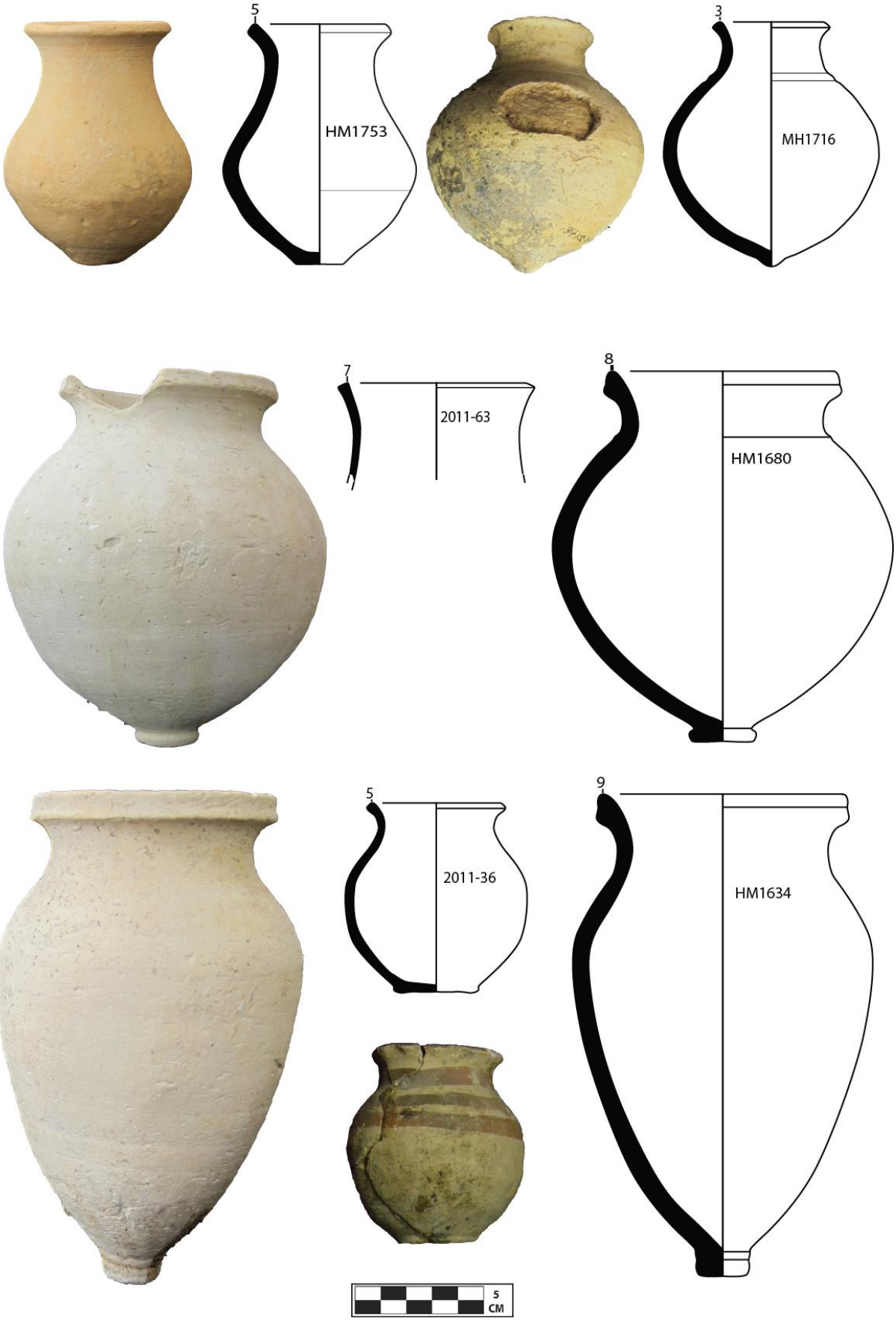

5
HM1753
3
MH1716
7
2011-63
8
HM1680
5
2011-36
9
HM1634
5
CM

Plate 16 small jars with concave neck

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension	Ware and Remarks	Typology of shapes
2011-27	K7	-	-	II	T.p.7	E	Rim diameter:8.2 cm Base diameter: 3.5cm Height: 13.5cm Status: complete	Firing: SU Color in: P17 Color out: S16 Mark of burning: O Temperature: H	Rim: 1012 Neck:3000 Body: 4001 Base: 2008
HM1750	T	I	I	-	T.p.7	E	Rim diameter:3.5 cm Base diameter: 08cm Height: 10.5 cm Status: rim	Firing: SU Color in:- Color out: S22 Mark of burning: O Temperature: H	Rim: 1005 Neck:3000 Body:4000 Base: 2006
HM1727	T	I	I	-	T. p. 7	E	Rim diameter: 5 cm Base diameter:06cm Height: 9.5cm Status: complete Comparison: Aššur (Pedde 2015, Taf. 47.1)	Firing: SU Color in: P17 Color out: S26 Mark of burning: O Temperature: H	Rim: 1005 Neck:3000 Body:4000 Base: 2007
2011-62	K7	-	-	IA	T. p. 7	E	Rim diameter: 10 cm Base diameter: - Height: - Status: rim	Firing: M Color in: P24 Color out: S7 Mark of burning: O Temperature: H	Rim: 1005 Neck:3000 Body:4002 Base: 2001
2013-07	K7	-	-	IA	T. p. 7	E	Rim diameter: 8 cm Base diameter: 1 cm Height: 10.7 cm Status: complete	Firing: SU Color in: P23 Color out: S25 Mark of burning: O Temperature: H	Rim: 1012 Neck:3000 Body: 4003 Base: 2011
2012-03	L7	-	-	I	T.p.7	E	Rim diameter:5 cm Base diameter: 9 cm Height: 8 cm Status: complete Comparison: Tell Ahmar (Jamieson 1999, fig.4: 7)	Firing: SU Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: 1001 Neck:3000 Body:4000 Base: 2011
HM1756	T	I	I	-	T.p.7	E	Rim diameter:9 cm Base diameter: 2 cm Height: 15 cm Status: complete	Firing: SU Color in: - Color out: S16 Mark of burning: O Temperature: H	Rim: 1000 Neck:3000 Body:4001 Base: 2006

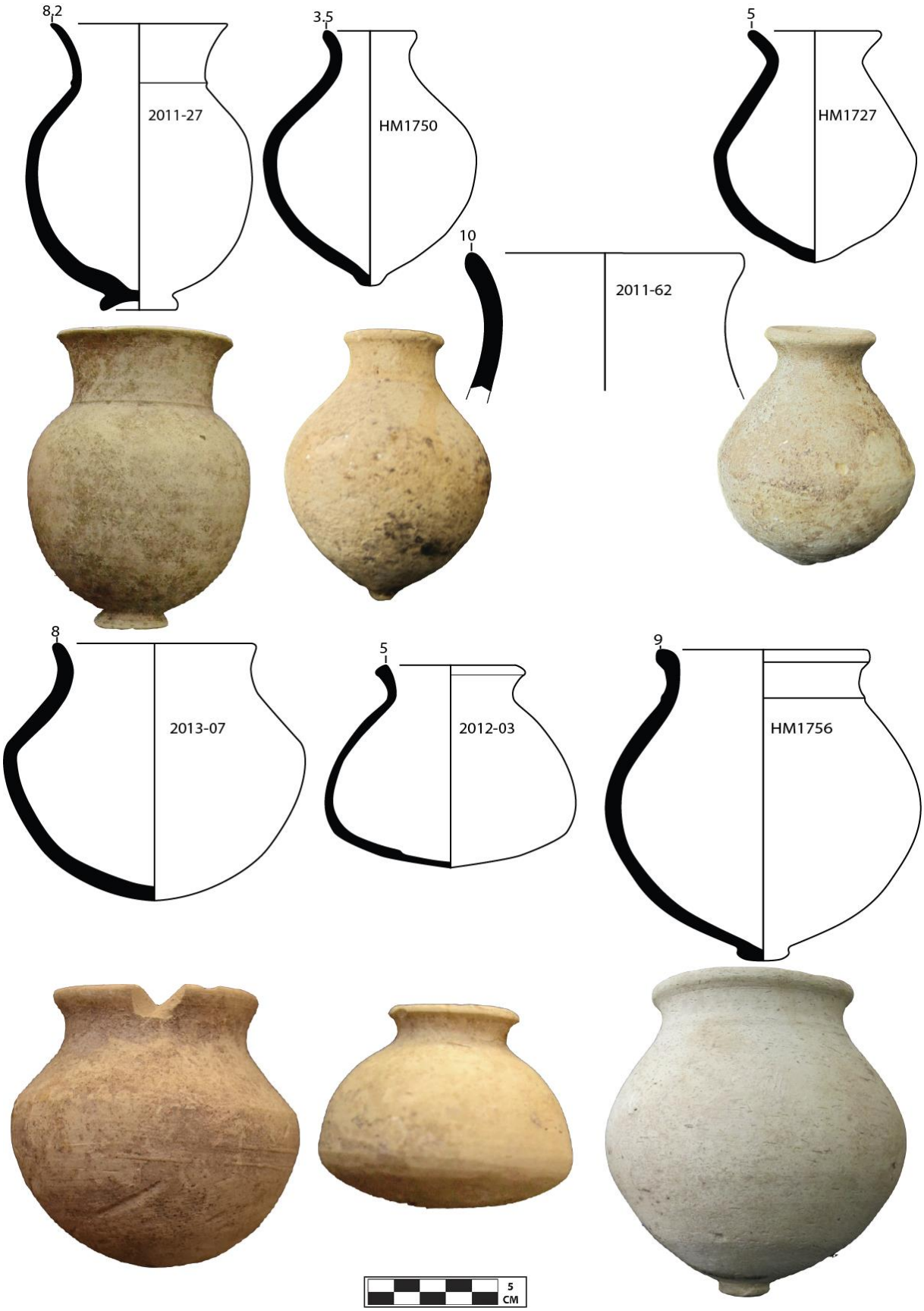

8,2
2011-27
3,5
HM1750
5
HM1727
10
2011-62
8
2013-07
5
2012-03
9
HM1756
5
CM

Plate 17 small jars with concave neck

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension	Ware and Remarks	Typology of shapes
2011-59	K7	-	-	IA	T.p.7	E	Rim diameter:12 cm Base diameter: - Height: - Status: rim	Firing: M Color in: P24 Color out: S7 Mark of burning: O Temperature: H	Rim: 1006 Neck:3006 Body: - Base: -
2011-54	K7	-	-	IA	T.p.7	E	Rim diameter:12 cm Base diameter: - Height: - Status: rim	Firing: SU Color in:P24 Color out: S7 Mark of burning: O Temperature: H	Rim: 1006 Neck:3003 Body:- Base: -
2011-58	K7	-	-	IA	T. p. 7	E	Rim diameter: 11 cm Base diameter:- Height: - Status: rim	Firing: SU Color in: P24 Color out: S7 Mark of burning: O Temperature: H	Rim: 1010 Neck:3003 Body:- Base: -
HM147	T	I	I	-	T. p. 7	E	Rim diameter: 10 cm Base diameter: 1.5 cm Height: 14 cm Status: rim Comparison: Aššur (Pedde 2015, Taf. 77.90.1)	Firing: M Color in: - Color out: S16 Mark of burning: O Temperature: H	Rim: 1007 Neck:3007 Body:4000 Base: 2005
HM107	T	I	I	-	T. p. 7	E	Rim diameter: 8 cm Base diameter: 1.5 cm Height: 13.5 cm Status: complete Comparison: Aššur (Pedde 2015, Taf. 40.1)	Firing: SU Color in: P24 Color out: S22 Mark of burning: O Temperature: H	Rim: 1007 Neck:3000 Body: 4001 Base: 2006
HM1711	T	I	I	-	T.p.9	G	Rim diameter: 8 cm Base diameter: 1.5 cm Height: 13 cm Status: complete Comparison: Aššur (Pedde 2015, Taf. 40.1)	Firing: SU Color in: P17 Color out: S22 Mark of burning: O Temperature: H	Rim: 1005 Neck:3000 Body:4001 Base: 2005


12
2011-59
12
2011-54
11
2011-58
10
HM147
8
HM107
8
HM001711
5 CM

Plate 18 small jars with flaring neck

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
HM1710	T	I	I	-	T.p.7	E	Rim diameter: 8.5cm Base diameter: 1.5 cm Height: 11cm Status: complete Comparison: Sabi Abyad (Duiterrmatt 2007, fig IV,91-r)	Firing: SU Color in: P17 Color out: S16 Mark of burning: O Temperature: H	Rim: 1005 Neck:3001 Body: 4002 Base: 2006
2011-9	K7	-	-	IIA	T.p.7	E	Rim diameter: 8.5 cm Base diameter: 3cm Height: 15 cm Status: complete Comparison: Aššur (Pedde 2015, Taf. 2. 149.1)	Firing: SU Color in:P17 Color out: S16 Mark of burning: O Temperature: H	Rim: 1005 Neck:3001 Body:4000 Base: 2005
HM1707	K7	-	-	IA	T. p. 9	G	Rim diameter: 6 cm Base diameter:1cm Height: 9 cm Status: complete	Firing: SU Color in: - Color out: S22 Mark of burning: O Temperature: H	Rim: 1005 Neck:3001 Body:4000 Base: 2007
HM1715	T	I	I	-	T. p. 7	E	Rim diameter: 6.5 cm Base diameter: 1 cm Height: 9 cm Status: complete Comparison: Aššur (Pedde 2015, Taf. 134.1-2)	Firing: M Color in: p22 Color out: S20 Mark of burning: O Temperature: H	Rim: 1005 Neck:3001 Body:4003 Base: 2006
HM48	T	I	I	-	T. p. 10	H	Rim diameter: 8.5 cm Base diameter: 1.2 cm Height: 10.5 cm Status: complete Comparison: Assur (Hausleiter 2010, Taf. 1, Ass. 14797.al)	Firing: SU Color in: P17 Color out: S16 Mark of burning: O Temperature: H	Rim: 1005 Neck:3001 Body: 4000 Base: 2006


8,5
HM1710
8,5
2011-9
6
HM1707
6,5
HM1715
8,5
HM48
5
CM

Plate 19 small jars with flaring neck

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
HM152	T	I	I	-	T.p.7	E	Rim diameter: 7.5 cm Base diameter: 1.5 cm Height: 12 cm Status: complete Comparison: Aššur (Pedde 2015, Taf. 20.8)	Firing: SU Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: 1007 Neck:3001 Body: 4000 Base: 2005
HM1706	T	I	I	-	T.p.7	E	Rim diameter: 7 cm Base diameter: 1.5 cm Height: 9.3 cm Status: complete Assur (Hausleiter 2010, Taf. 1, Ass. 14797.f)	Firing: SU Color in:- Color out: S16 Mark of burning: O Temperature: H	Rim: 1007 Neck:3001 Body:4001 Base: 2006
HM1730	T	I	I	-	T. p. 10	H	Rim diameter: 8.5 cm Base diameter:1cm Height: 11 cm Status: complete Comparison: Aššur (Pedde 2015, Taf. 48.1)	Firing: SU Color in: - Color out: S22 Mark of burning: O Temperature: H	Rim: 1007 Neck:3001 Body:4001 Base: 2006
HM146	T	I	I	-	T. p. 7	E	Rim diameter: 8 cm Base diameter: 1 cm Height: 11.5 cm Status: complete Comparison: Tall Šēh Hamad (Kreppner, 2006, Taf 52.12)	Firing: M Color in: p23 Color out: S22 Mark of burning: O Temperature: H	Rim: 1007 Neck:3001 Body:4001 Base: 2005

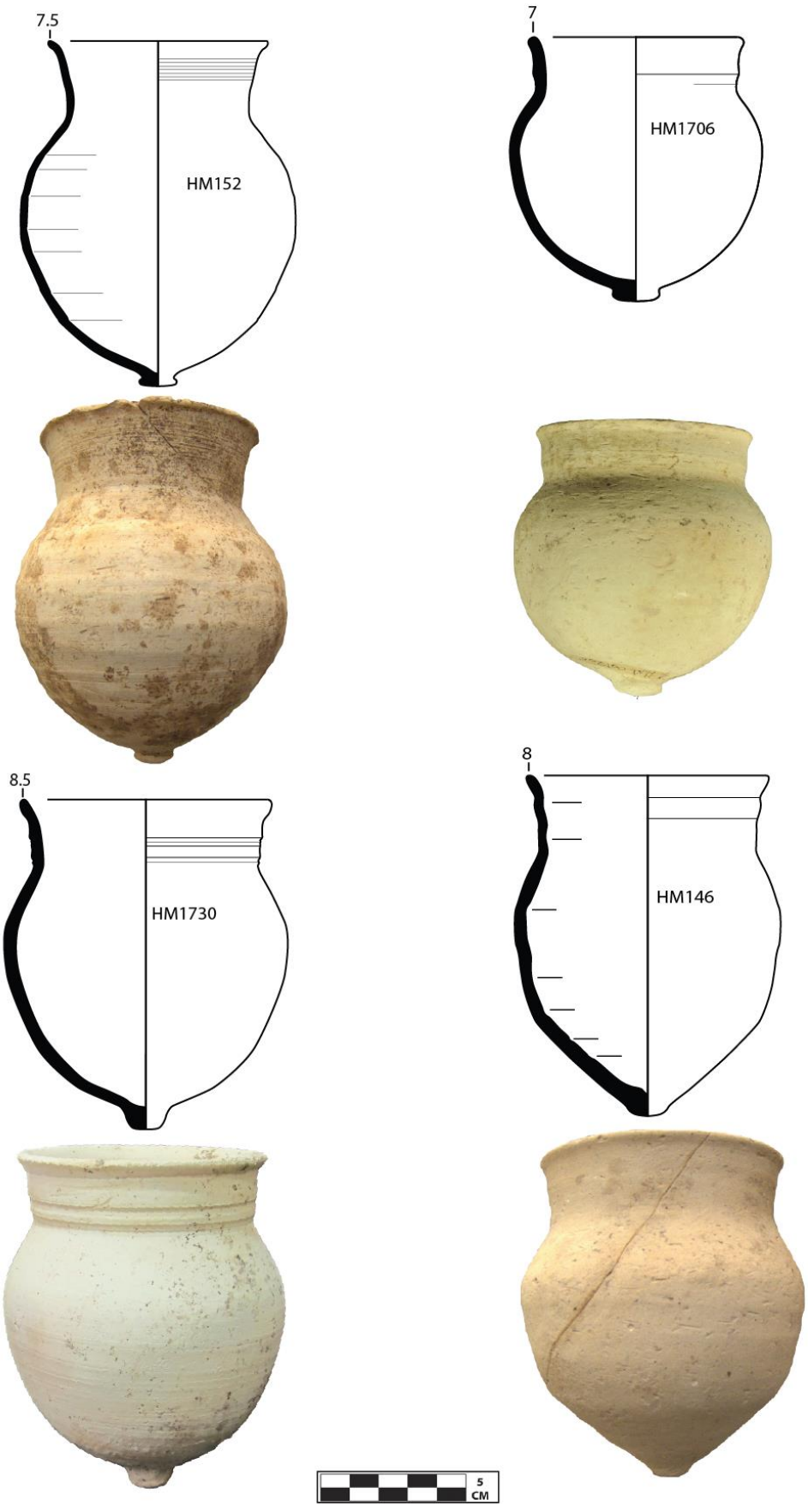
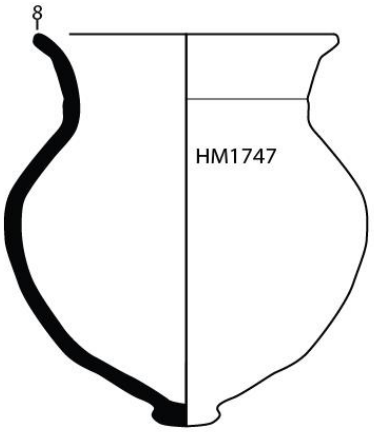

7.5
HM152
7
HM1706
8.5
HM1730
8
HM146
5
CM

Plate 20 small jars with concave neck

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
HM1747	T	I	I	-	T.p.9	G	Rim diameter: 8 cm Base diameter: 1.8 cm Height: 10.5 cm Status: complete Comparison: Assur (Hausleiter 2010, Taf. 1, Ass. 14797.f)	Firing: SU Color in: P- Color out: S21 Mark of burning: O Temperature: H	Rim: 1007 Neck:3001 Body: 4000 Base: 2006
HM1733	T	I	I	-	T.p.10	H	Rim diameter: 7.5 cm Base diameter: 08 cm Height: 9.5 cm Status: complete Comparison: Assur (Hausleiter 2010, Taf. 1, Ass. 14797.f)	Firing: SU Color in:P17 Color out: S30 Mark of burning: O Temperature: H	Rim: 1007 Neck:3001 Body:4001 Base: 2000
HM1726	T	I	I	-	T. p. 9	G	Rim diameter: 7 cm Base diameter:1.5 cm Height: 9 cm Status: complete Comparison: Assur (Hausleiter 2010, Taf. 1, Ass. 14797.f)	Firing: SU Color in: - Color out: S22 Mark of burning: O Temperature: H	Rim: 1007 Neck:3001 Body:4001 Base: 2006
HM1695	T	I	I	-	T. p. 9	G	Rim diameter: 7 cm Base diameter: 1.4 cm Height: 9.5 cm Status: complete Comparison: Aššur (Pedde 2015, Taf. 20. 6)	Firing: M Color in: p17 Color out: S16 Mark of burning: O Temperature: H	Rim: 1002 Neck:3001 Body:4001 Base: 2006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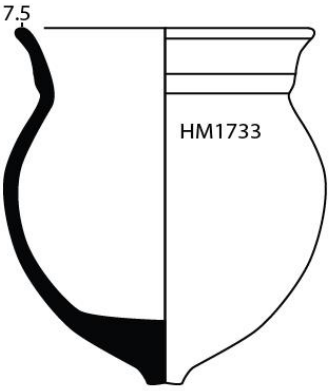
HM1747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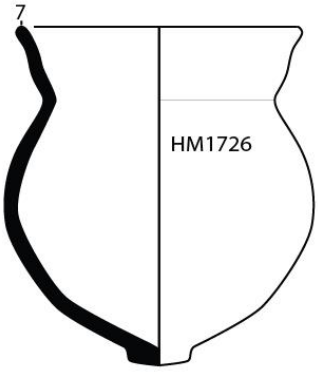
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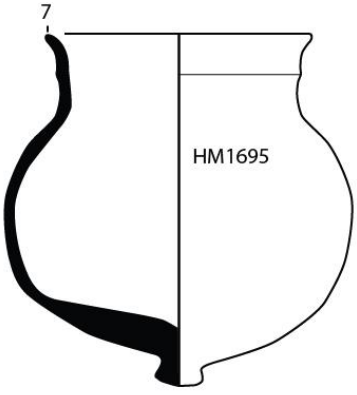
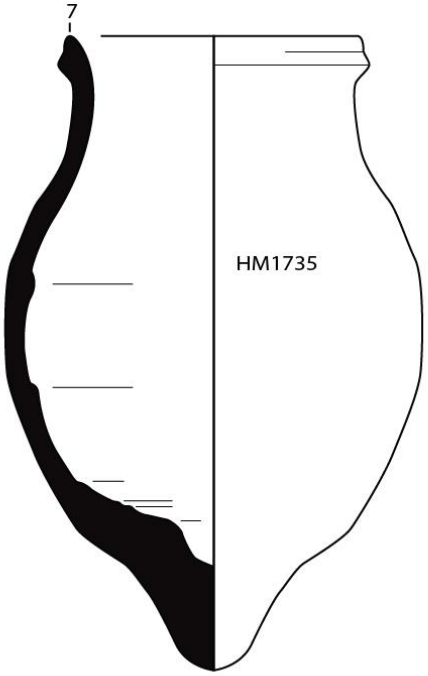
HM1726


7
HM1695


5
CM

Plate 21 small jars with flaring neck

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
HM1735	T	I	I	-	T.p.7	E	Rim diameter: 7cm Base diameter: 1.5 cm Height: 15 cm Status: complete Comparison: Assyrian pottery, (Alnuami 1995, plate 34. Fig. 8.)	Firing: SU Color in: - Color out: S16 Mark of burning: O Temperature: H	Rim: 1007 Neck:3001 Body: 4000 Base: 2005
2011-03	K7	-	-	IB	T.p.10	H	Rim diameter: 10 cm Base diameter: 5.5 cm Height: 17 cm Status: complete Comparison: Assur (Haller 1954, Taf.2, ad)	Firing: SU Color in:P29 Color out: S30 Mark of burning: O Temperature: H	Rim: 1002 Neck:3001 Body:4000 Base: 2001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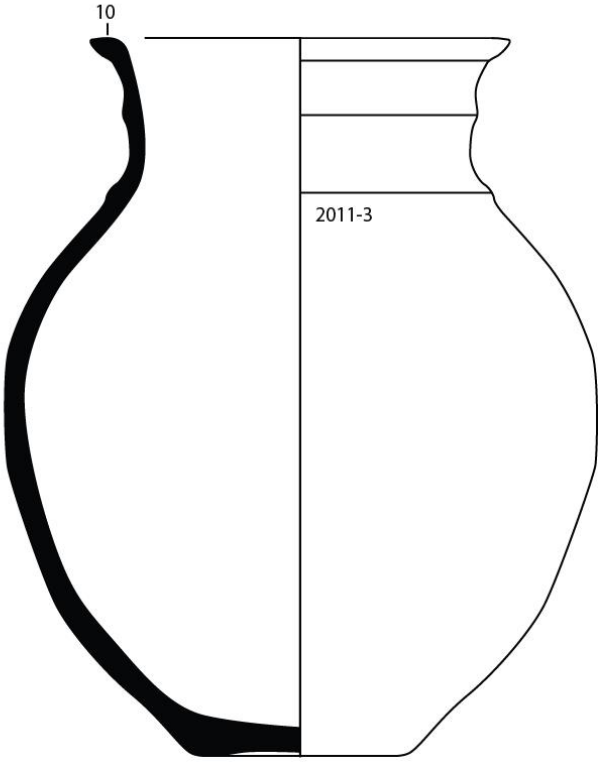
HM1735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2011-3


5
CM

Plate 22 jars with S shape

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
2012-02	L7	-	-	I	T.p.9	G	Rim diameter: 8cm Base diameter: 2.5 cm Height: 8 cm Status: complete	Firing: SU Color in: P17 Color out: S16 Mark of burning: O Temperature: H	Rim: 1005 Neck:3000 Body: 4004 Base: 2008
HM1674	T	I	I	-	T.p.10	H	Rim diameter: 6 cm Base diameter: 4.5 cm Height: 11.5 cm Status: complete Comparison: Aššur (Pedde 2015, Taf. 89.2)	Firing: SO Color in:- Color out: S16 Mark of burning: O Temperature: L	Rim: 1002 Neck:3000 Body:4004 Base: 2000
HM1709	T	I	I	-	T.p.7	E	Rim diameter: 9.5cm Base diameter: 4.3 cm Height: 11 cm Status: complete	Firing: SU Color in: - Color out: S16 Mark of burning: O Temperature: H	Rim: 1016 Neck:3000 Body: 4004 Base: 2000
HM11683	T	I	I	-	T.p.7	E	Rim diameter: 7.5 cm Base diameter: 4 cm Height: 15 cm Status: complete Comparison: Tell Al Rimah, (Postgate and al 1997, plate 82. 950.)	Firing: SU Color in: P23 Color out: S22 Mark of burning: O Temperature: H	Rim: 1007 Neck:3003 Body: 4004 Base: 2003

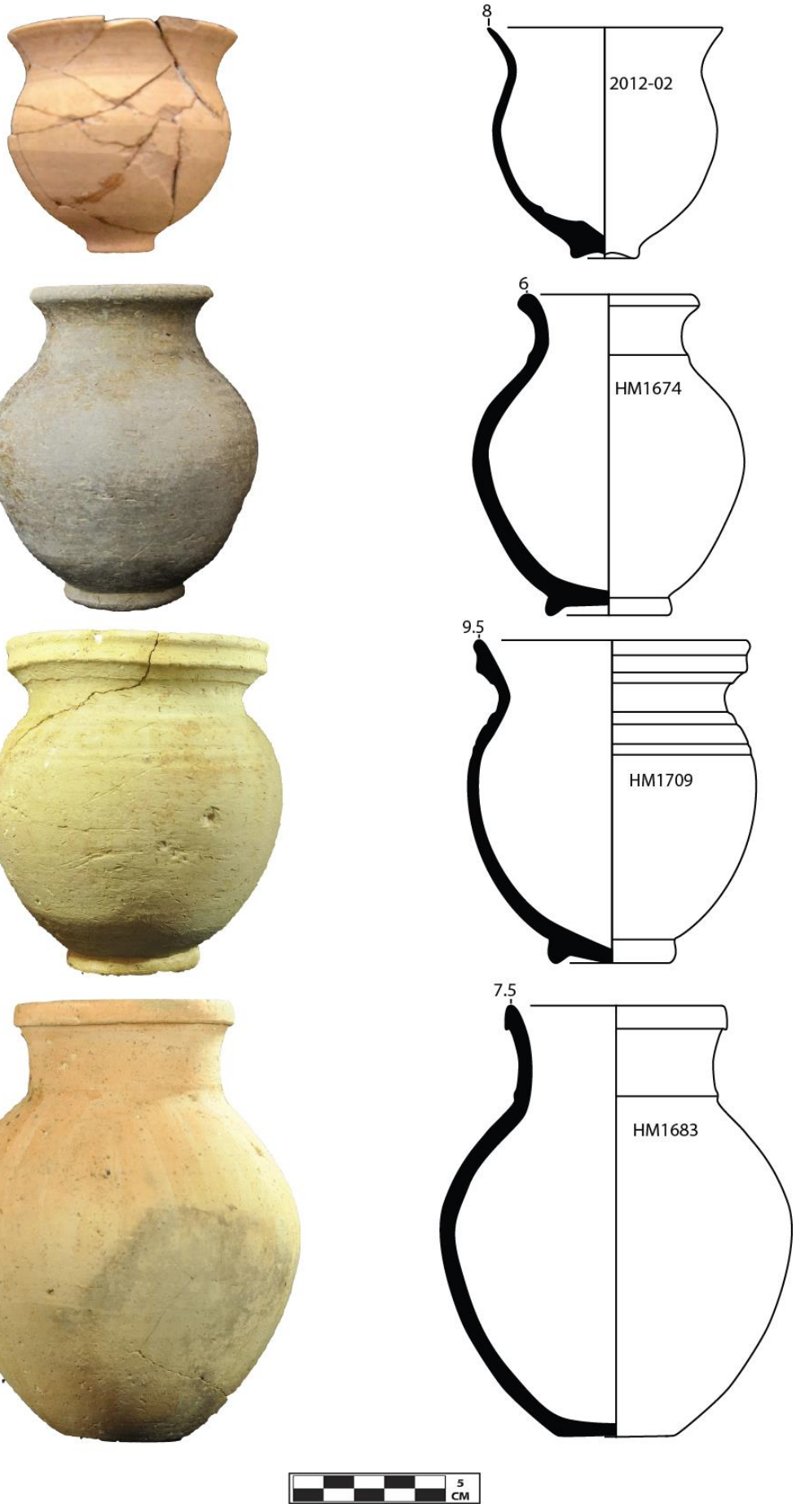
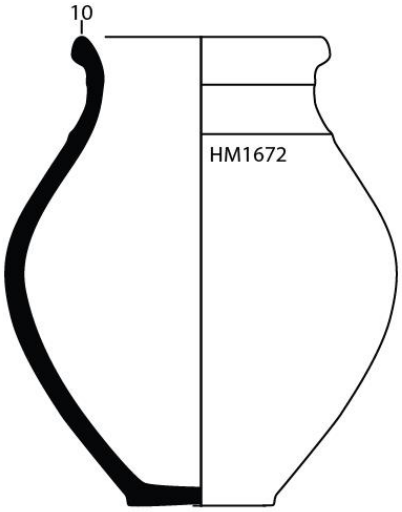

8
2012-02
6
HM1674
9.5
HM1709
7.5
HM1683
5
CM

Plate 23 jars with S shape

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension	Ware and Remarks	Typology of shapes
HM1672	L7	-	-	I	T.p.9	G	Rim diameter: 10 cm Base diameter: 6 cm Height: 20 cm Status: complete	Firing: SU Color in: - Color out: S21 Mark of burning: O Temperature: H	Rim: 1000 Neck:3000 Body: 4004 Base: 2000
HM1674	T	I	I	-	T.p.10	H	Rim diameter: 9 cm Base diameter: 6.5 cm Height: 23 cm Status: complete	Firing: SU Color in:- Color out: S16 Mark of burning: O Temperature: L	Rim: 1006 Neck:3000 Body:4004 Base: 2000
HM1755	T	I	I	-	T.p.10	H	Rim diameter: 9.5cm Base diameter: 5 cm Height: 19 cm Status: complete Comparison: Sabi Abyad (Duiterrmatt 2007, fig IV,79-O)	Firing: SU Color in: P24 Color out: S20 Mark of burning: O Temperature: H	Rim: 1016 Neck:3000 Body: 4004 Base: 2000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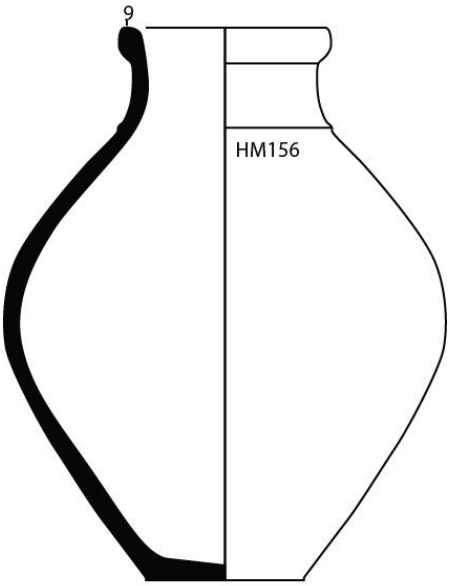
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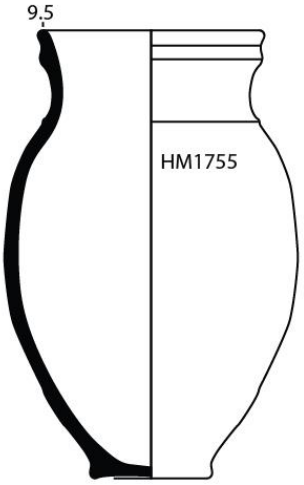
HM156


9.5
HM1755


5
CM

Plate 24 tripod jars

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
HM1752	T	I	I	-	T.p.7	E	Rim diameter: 3.5 cm Base diameter: 2.2 cm Height: 8 cm Status: complete Comparison: Unique Form	Firing: SU Color in: - Color out: S16 Mark of burning: O Temperature: H	Rim: 1016 Neck:3000 Body: 4001 Base: 2009
HM1678	T	I	I	-	T.p.7	E	Rim diameter: 3.5 cm Base diameter: 2.5cm Height: 8.5 cm Status: complete Comparison: Unique Form	Firing: SU Color in:P22 Color out: S17 Mark of burning: O Temperature: L	Rim: 1016 Neck:3000 Body:4001 Base: 2009
HM1677	T	I	I	-	T.p.10	H	Rim diameter: 4.5cm Base diameter: 1.8 cm Height: 9.5 cm Status: complete Comparison: Unique Form	Firing: SU Color in: P23 Color out: S16 Mark of burning: O Temperature: M	Rim: 1016 Neck:3003 Body: 4000 Base: 2009
HM1679	T	I	I	-	T.p.7	E	Rim diameter: 3.5 cm Base diameter: 2 cm Height: 8 cm Status: complete Comparison: Unique Form	Firing: SU Color in: - Color out: S22 Mark of burning: O Temperature: H	Rim: 1016 Neck:3000 Body: 4001 Base: 2009
HM1702	T	I	I	-	T.p.10	H	Rim diameter: 3.5 cm Base diameter: 1.5 cm Height: 9 cm Status: complete Comparison: Unique Form	Firing: SU Color in:P24 Color out: S16 Mark of burning: O Temperature: L	Rim: 1000 Neck:3000 Body:4001 Base: 2009
HM1728	T	I	I	-	T.p.10	H	Rim diameter: 3.5 cm Base diameter: 2 cm Height: 7 cm Status: complete Comparison: Unique Form	Firing: SU Color in: P24 Color out: S22 Mark of burning: O Temperature: H	Rim: 1016 Neck:3000 Body: 4001 Base: 2009

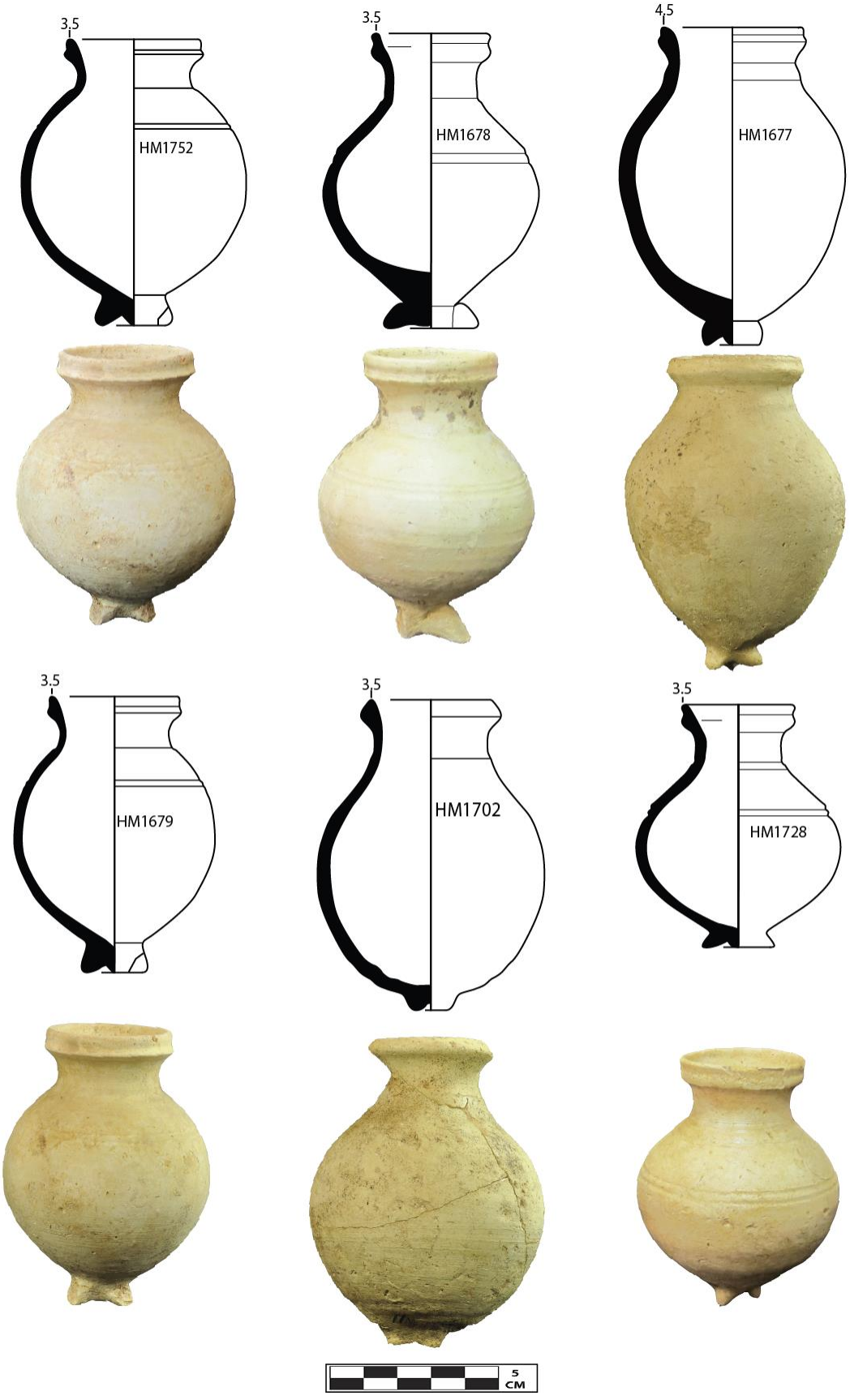
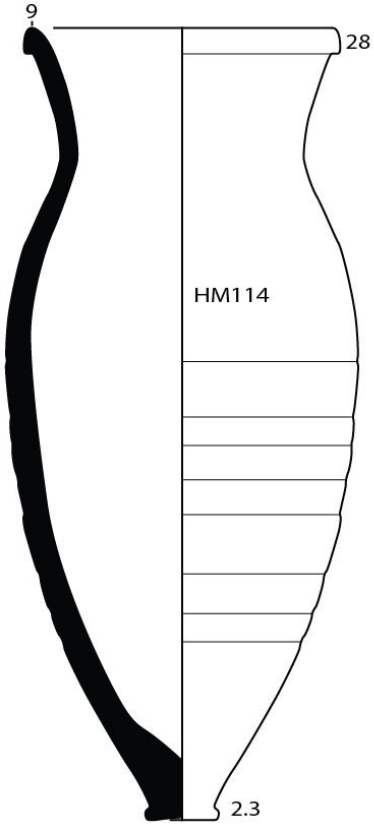
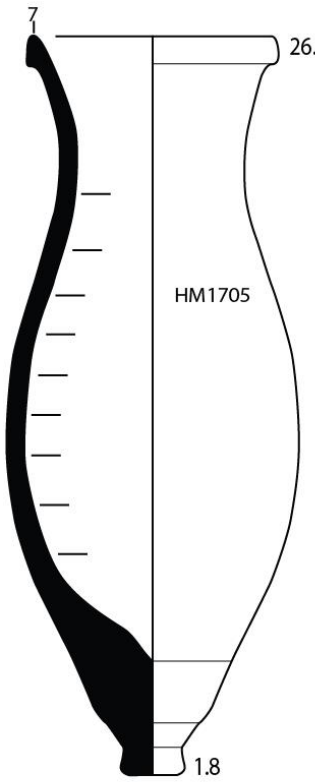
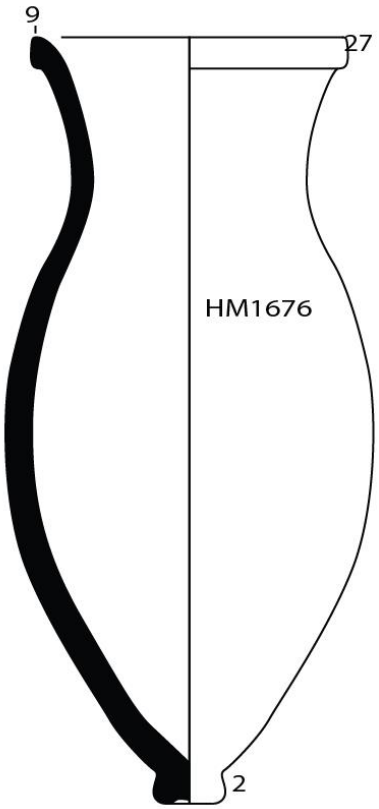

3.5
HM1752
3.5
HM1678
4.5
HM1677
3.5
HM1679
3.5
HM1702
3.5
HM1728
5
CM

Plate 25 big jars

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
HM114	T	I	I	-	T.p.10	H	Rim diameter: 9 cm Base diameter: 2.3 cm Height: 28 cm Status: complete	Firing: SU Color in: - Color out: S16 Mark of burning: O Temperature: H	Rim: 1005 Neck:3000 Body: 4000 Base: 2005
HM1705	T	I	I	-	T.p.7	E	Rim diameter: 7 cm Base diameter: 2.5cm Height: 1.8 cm Status: complete Comparison: Aššur (Pedde 2015, Taf. 110.153.2)	Firing: SU Color in:- Color out: S16 Mark of burning: O Temperature: L	Rim: 1005 Neck:3000 Body:4000 Base: 2005
HM1676	T	I	I	-	T.p.10	H	Rim diameter: 9 cm Base diameter: 2 cm Height: 27 cm Status: complete Comparison: Tell Al Rimah, (Pfälzner 1995, Taf, 177.f.)	Firing: SU Color in: P18 Color out: S17 Mark of burning: O Temperature: M	Rim: 1000 Neck:3000 Body: 4000 Base: 2005


9
28
HM114
2.3

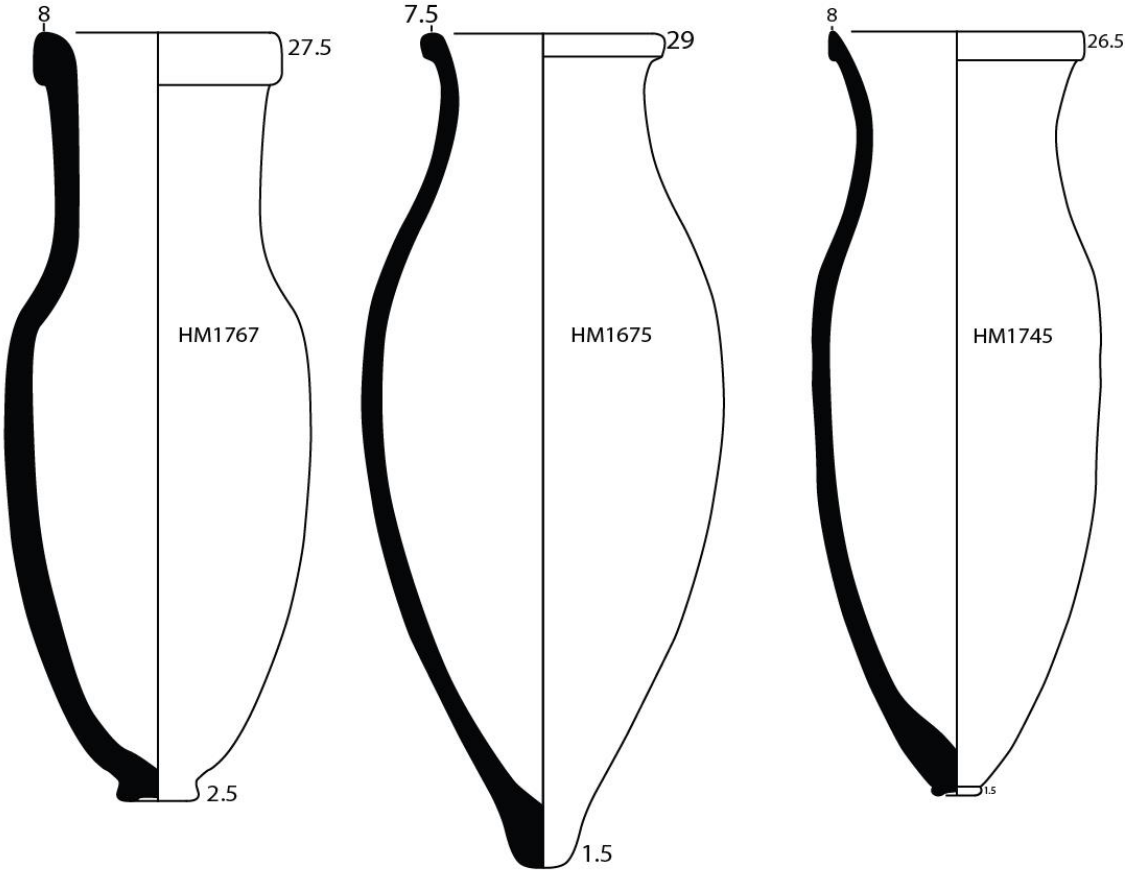

7
26.5
HM1705
1.8


9
27
HM1676
2


5
CM

Plate 26

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
HM1767	T	I	I	-	T.p.10	H	Rim diameter: 8 cm Base diameter: 2.5 cm Height: 27.5 cm Status: complete Comparison:	Firing: SU Color in: - Color out: S16 Mark of burning: O Temperature: H	Rim: 1003 Neck:3003 Body: 4000 Base: 2005
HM1675	T	I	I	-	T.p.7	E	Rim diameter: 7.5 cm Base diameter: 1.5 cm Height: 29 cm Status: complete Comparison: Aššur (Pedde 2015, Taf. 1.152.35)	Firing: SU Color in:P18 Color out: S20 Mark of burning: O Temperature: L	Rim: 1005 Neck:3003 Body:4000 Base: 2005
HM1745	T	I	I	-	T.p.10	H	Rim diameter: 8 cm Base diameter: 1.5 cm Height: 26.5 cm Status: complete Comparison:	Firing: SU Color in: - Color out: S16 Mark of burning: O Temperature: M	Rim: 1005 Neck:3000 Body: 4000 Base: 2005


8
27.5
HM1767
2.5
7.5
29
HM1675
1.5
8
26.5
HM1745
1.5


5
CM

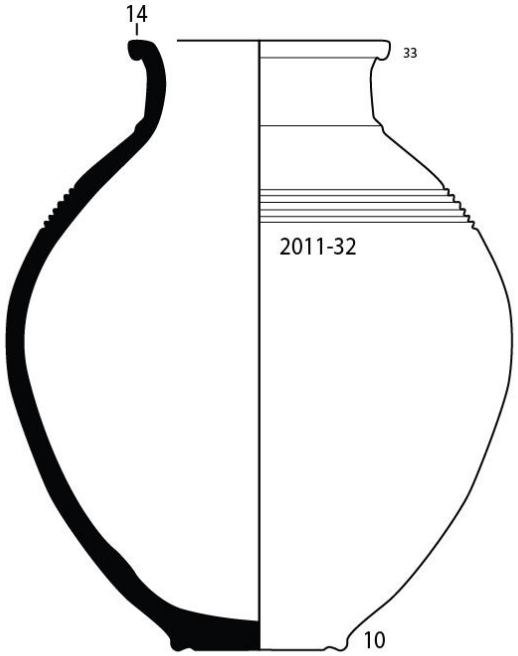
Plate 26 big jar

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
HM78	T	I	I	-	T.p.10	H	Rim diameter: 8 cm Base diameter: 3 cm Height: 27.5 cm Status: complete Comparison: Aššur (Pedde 2015, Taf. 1.158-3)	Firing: SU Color in: - Color out: S16 Mark of burning: O Temperature: H	Rim: 1005 Neck:3000 Body: 4000 Base: 2005
HM1714	T	I	I	-	T.p.7	E	Rim diameter: 8 cm Base diameter: 1.5 cm Height: 26 cm Status: complete Comparison:	Firing: SU Color in:- Color out: S22 Mark of burning: O Temperature: L	Rim: 1005 Neck:3000 Body:4000 Base: 2005
HM1759	T	I	I	-	T.p.2	A2	Rim diameter: 7 cm Base diameter: 2 cm Height: 19.5 cm Status: complete Comparison:	Firing: SU Color in: - Color out: S20 Mark of burning: O Temperature: M	Rim: 1010 Neck:3000 Body: 4000 Base: 2005
2011-35	K7	-	-	II	T.p.10	H	Rim diameter: 11 cm Base diameter: 8.5 cm Height: 19 cm Status: complete Comparison: Assur (Haller 1954, Taf 2, ae)	Firing: SU Color in: P24 Color out: S16 Mark of burning: O Temperature: M	Rim: 1007 Neck:3000 Body: 4001 Base: 2001


8
27.5
HM78
3
8
26
HM1714
1.5
7
19.5
HM1759
2
11
19
2011-35
8.5
5
CM

Plate 28 big jars

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
2011-32	K7	-	-	II	T.p.10	H	Rim diameter: 14 cm Base diameter: 10 cm Height: 33 cm Status: complete Comparison: Assur (Haller 1954, Taf.2. ad)	Firing: M Color in: P17 Color out: S16 Mark of burning: O Temperature: H	Rim: 1001 Neck:3000 Body: 4000 Base: 2002
2011-31	K7	-	-	II	T.p.10	H	Rim diameter: 14 cm Base diameter: 12.5 cm Height: 38.5 cm Status: complete Comparison: Šēh Hamad and Bderi (Pfälzner 1995, Taf.185. b)	Firing: M Color in:P24 Color out: S16 Mark of burning: O Temperature: L	Rim: 1001 Neck:3000 Body:4000 Base: 2004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33
2011-32
10

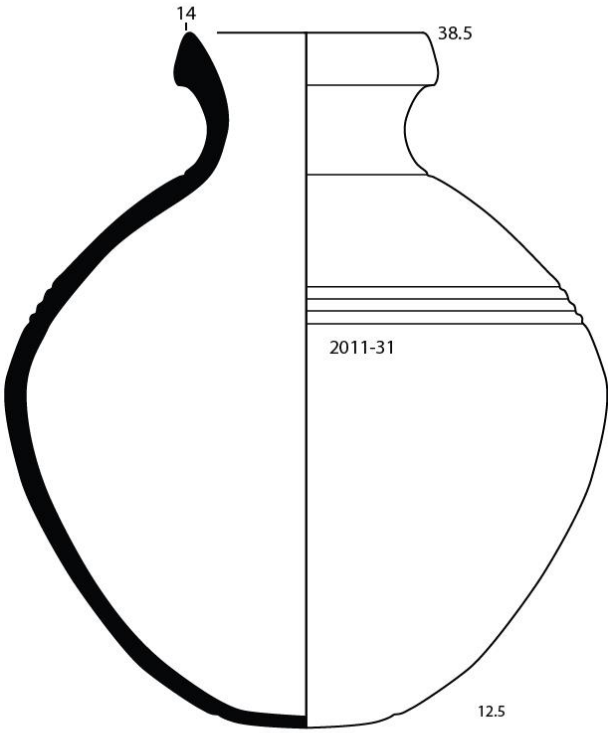
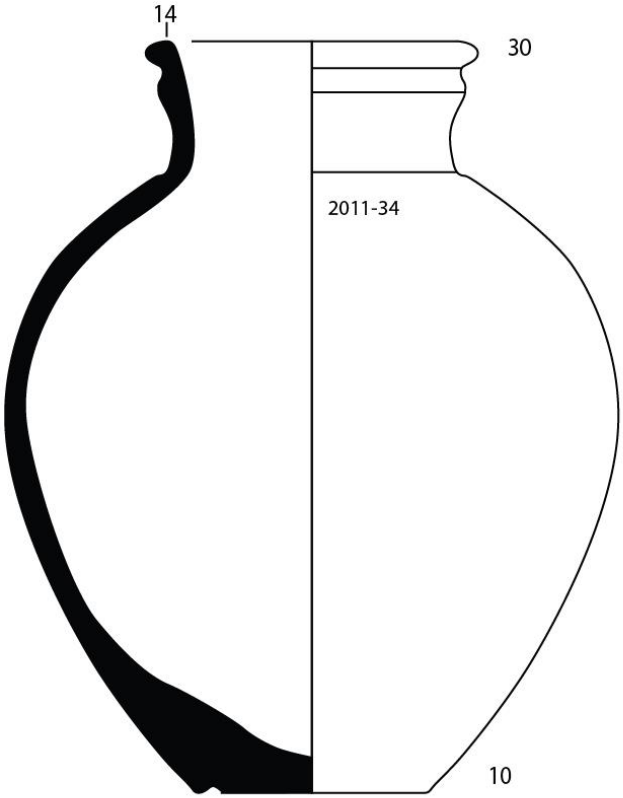

14
38.5
2011-31
12.5

Plate 29 big jars

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
2011-33	K7	-	-	II	T.p.10	H	Rim diameter: 11.5 cm Base diameter: 9 cm Height: 30 cm Status: complete Comparison: Šēh Hamad and Bderi (Pfälzner 1995, Taf.173.e)	Firing: M Color in: P17 Color out: S16 Mark of burning: O Temperature: H	Rim: 1003 Neck:3000 Body: 4000 Base: 2001
2011-34	K7	-	-	II	T.p.3	A3	Rim diameter: 14 cm Base diameter: 10 cm Height: 30 cm Status: complete Comparison: Šēh Hamad and Bderi (Pfälzner 1995, Taf. 149. c)	Firing: M Color in:P6 Color out: S20 Mark of burning: O Temperature: L	Rim: 1001 Neck:3000 Body:4000 Base: 2004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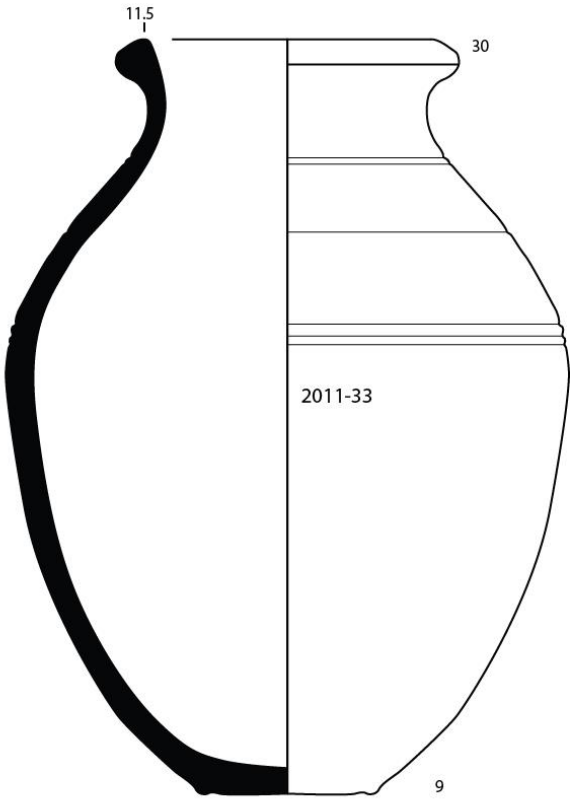
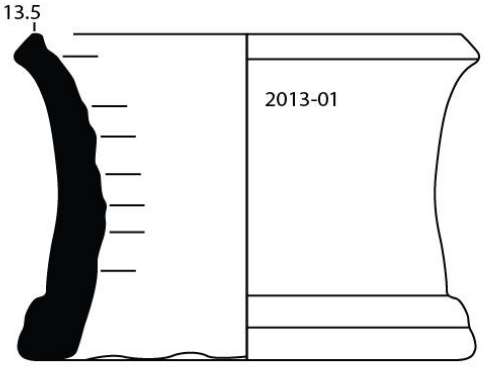
30
2011-34
10


11.5
30
2011-33
9


5
CM

Plate 30 Pot stands

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
2011-01	J6	-	-	1	T.p.10	H	Rim diameter: 13.5 cm Base diameter: 11 cm Height: 14.5 cm Status: complete Comparison:	Firing: M Color in: P17 Color out: S16 Mark of burning: O Temperature: H	Rim: 1000 Neck:- Body: - Base: 1010
2011-15	J6	-	-	I	T.p.10	H	Rim diameter: 16.5 cm Base diameter: 17.5 cm Height: 13.5 cm Status: complete Comparison:	Firing: M Color in:P24 Color out: S22 Mark of burning: O Temperature: H	Rim: 1007 Neck:- Body:- Base: 1005
2011-30	K7	-	-	IA	T.p.2	A3	Rim diameter: 14.5 cm Base diameter: 15.5 cm Height: 21 cm Status: complete Comparison: Šēh Hamad and Bderi (Pfälzner 1995, Taf.178. h)	Firing: M Color in:P17 Color out: S16 Mark of burning: O Temperature: L	Rim: 1000 Neck:- Body:- Base: 1005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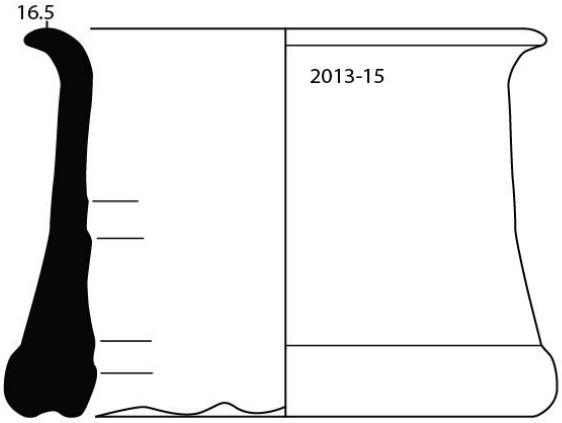
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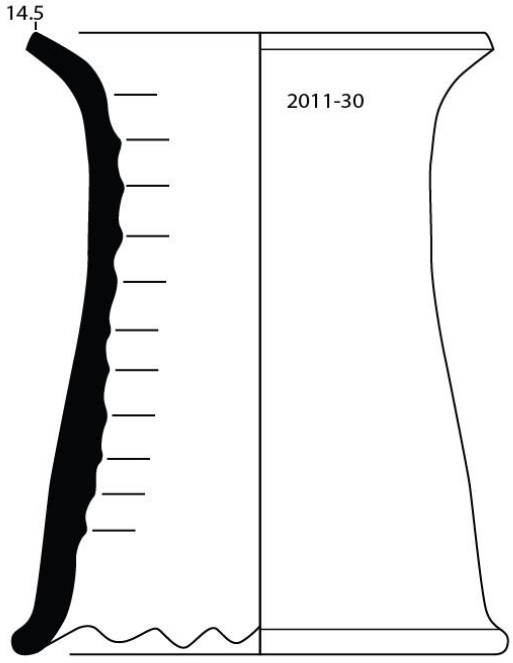
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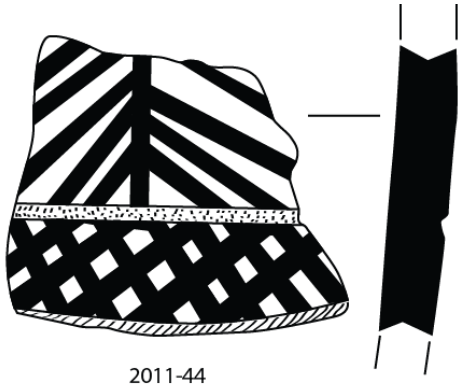
2011-30

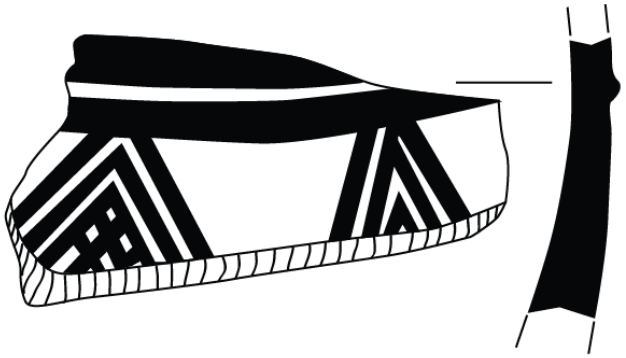

5
CM

Plate 31 Body sherds

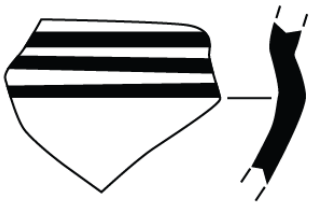
Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
2011-43	K7	-	-	1A	T.p.7	E	Rim diameter:- Base diameter: Height: Status: Body sherd Comparaison: Sabi Abyad (Duiterrmatt 2007, fig IV, 97, 112)	Firing: SU Color in: P24 Color out: S7 Mark of burning: O Temperature: H	Rim: - Neck:- Body: - Base: -
2011-44	K7	-	-	IA	T.p.7	E	Rim diameter: Base diameter: Height: Status: Body sherd Comparison: Sabi Abyad (Duiterrmatt 2007, fig IV, 97, 112)	Firing: SU Color in:P24 Color out: S7 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: -
2011-46	K7	-	-	IA	T.p.7	E	Rim diameter: Base diameter: Height: Status: Body sherd Comparison: Sabi Abyad (Duiterrmatt 2007, fig IV, 97, 112)	Firing: SU Color in:P24 Color out: S7 Mark of burning: O Temperature: L	Rim: - Neck:- Body:- Base: -
2011-47	K7	-	-	1A	T.p.7	E	Rim diameter: - Base diameter: - Height: - Status: Body sherd Comparison: Sabi Abyad (Duiterrmatt 2007, fig IV, 97, 112)	Firing: SU Color in: P24 Color out: S7 Mark of burning: O Temperature: H	Rim: - Neck:- Body: - Base: -
2011-45	K7	-	-	IA	T.p.7	E	Rim diameter: - Base diameter: - Height: - Status: Body sherd Comparison: Sabi Abyad (Duiterrmatt 2007, fig IV, 97, 112)	Firing: SU Color in:P24 Color out: S7 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: -
2011-50	K7	-	-	IA	T.p.7	E	Rim diameter: - Base diameter: - Height: - Status: Body sherd Comparison: Sabi Abyad (Duiterrmatt 2007, fig IV, 97, 112)	Firing: SU Color in:P24 Color out: S7 Mark of burning: O Temperature: L	Rim: - Neck:- Body:- Base: -
2011-51	K7	-	-	1A	T.p.7	E	Rim diameter: - Base diameter: - Height: - Status: Body sherd Comparaison: Sabi Abyad (Duiterrmatt 2007, fig IV, 97, 112)	Firing: SU Color in: P24 Color out: S7 Mark of burning: O Temperature: H	Rim: - Neck:- Body: - Base: -
2011-48	K7	-	-	IA	T.p.7	E	Rim diameter: - Base diameter: - Height: - Status: Body sherd Comparison: Sabi Abyad (Duiterrmatt 2007, fig IV, 97, 112)	Firing: SU Color in:P24 Color out: S7 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: -
2011-49	K7	-	-	IA	T.p.7	E	Rim diameter: - Base diameter: - Height: - Status: Body sherd Comparison: Sabi Abyad (Duiterrmatt 2007, fig IV, 97, 112)	Firing: SU Color in:P24 Color out: S7 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: -
2011-52	K7	-	-	1A	T.p.7	E	Rim diameter: - Base diameter: - Height: - Status: Body sherd Comparison: Sabi Abyad (Duiterrmatt 2007, fig IV, 97, 112)	Firing: SU Color in: P24 Color out: S7 Mark of burning: O Temperature: H	Rim: - Neck:- Body: - Base: -
2011-53	K7	-	-	IA	T.p.7	E	Rim diameter: - Base diameter: - Height: - Status: Body sherd Comparison:	Firing: SU Color in:P24 Color out: S7 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: -



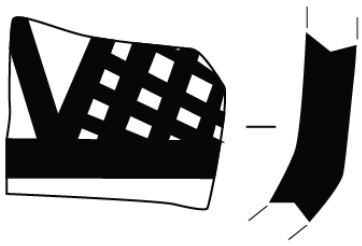
2011-44



2011-43

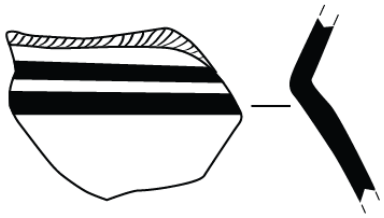


2011-45

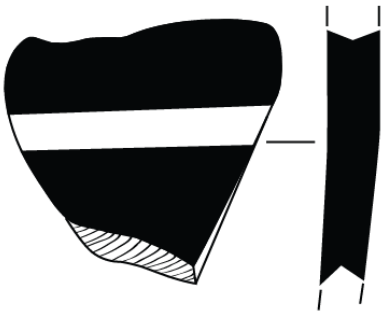


2011-47

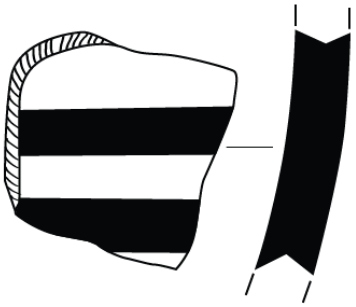
2011-46



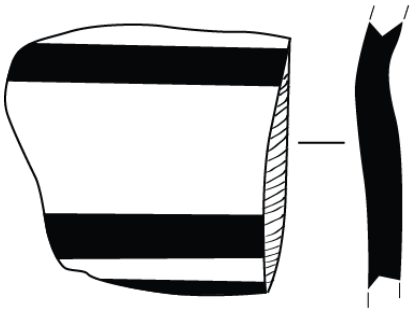
2011-48



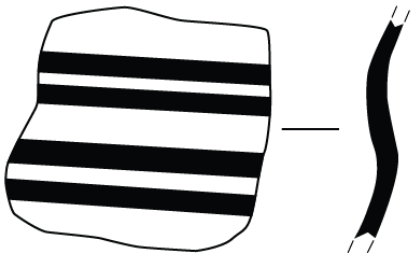
2011-51



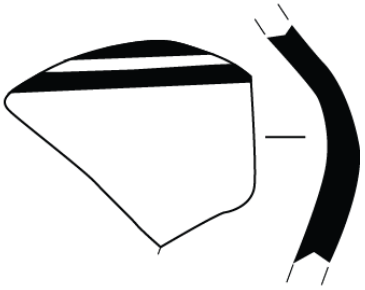
2011-50



2011-53



2011-52



2011-49

Plate 32 bases

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
2011-69	K7	-	-	1A	T.p.10	H	Rim diameter: - Base diameter: 3.7cm Height: - Status: base Comparison:	Firing: M Color in: P24 Color out: S7 Mark of burning: O Temperature: H	Rim: - Neck:- Body: - Base: 2001
2011-02	K7	-	-	IB	T.p.10	H	Rim diameter: - Base diameter: 5cm Height: - Status: base Comparison: Sabi Abyad (Duiterrmatt 2007, fig IV,91-I)	Firing: M Color in:P24 Color out: S22 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: 2001
2011-67	K7	-	-	IA	T.p.10	H	Rim diameter: - Base diameter: 1 cm Height: - Status: base comparison:	Firing: M Color in:P24 Color out: S7 Mark of burning: O Temperature: L	Rim: - Neck:- Body:- Base: 2011
2011-68	K7	-	-	1A	T.p.10	H	Rim diameter: - Base diameter: 3.4 cm Height: - Status: base Comparison:	Firing: M Color in: P24 Color out: S7 Mark of burning: O Temperature: H	Rim: - Neck:- Body: - Base: 2008
2011-80	K7	-	-	II	T.p.10	H	Rim diameter: - Base diameter: 3cm Height: - Status: base Comparison:	Firing: M Color in:P24 Color out: S7 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: 2008
2011-71	K7	-	-	IA	T.p.10	H	Rim diameter: - Base diameter: 3 cm Height: - Status: base Comparison:	Firing: M Color in:P24 Color out: S7 Mark of burning: O Temperature: L	Rim: - Neck:- Body:- Base: 2008

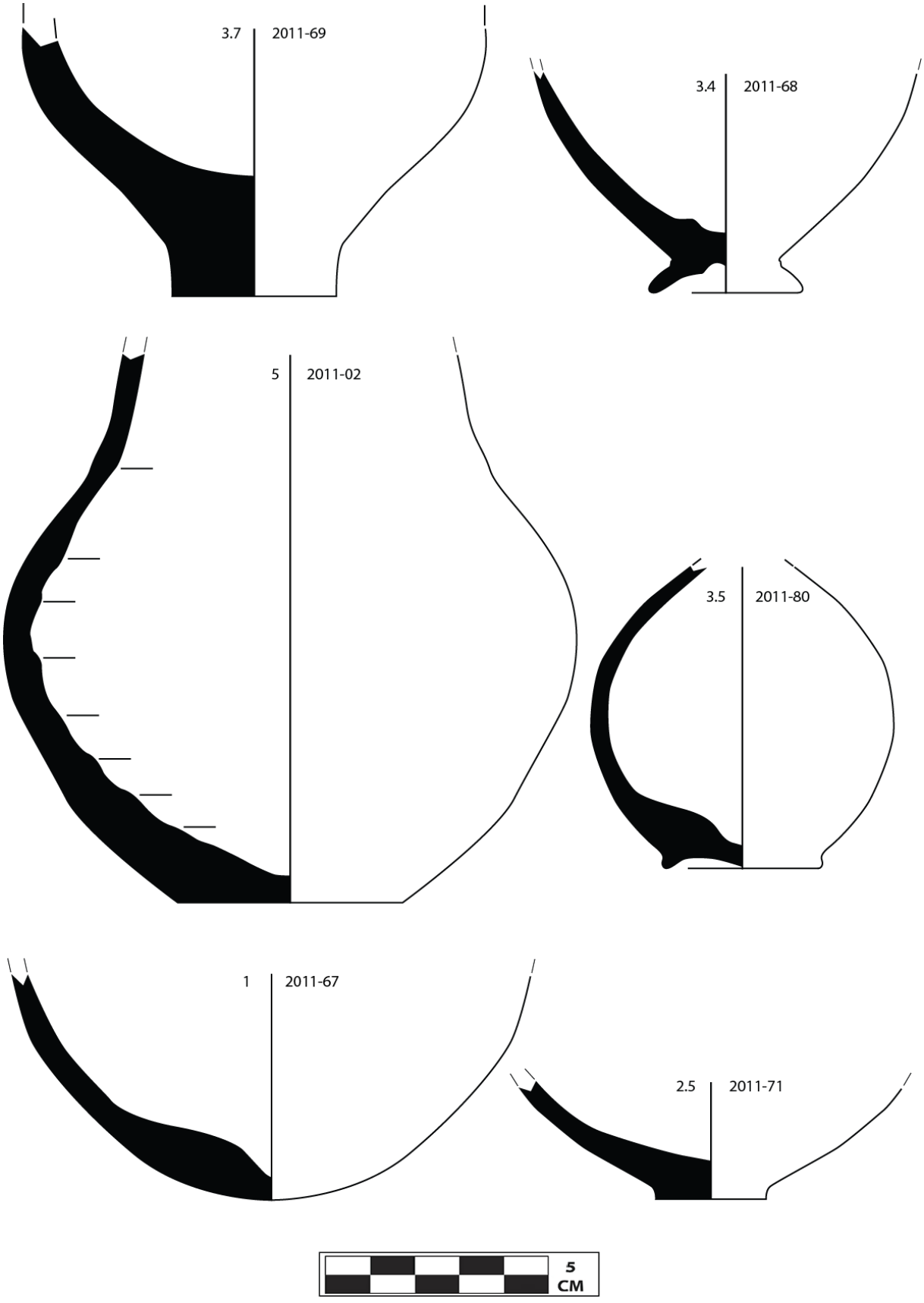
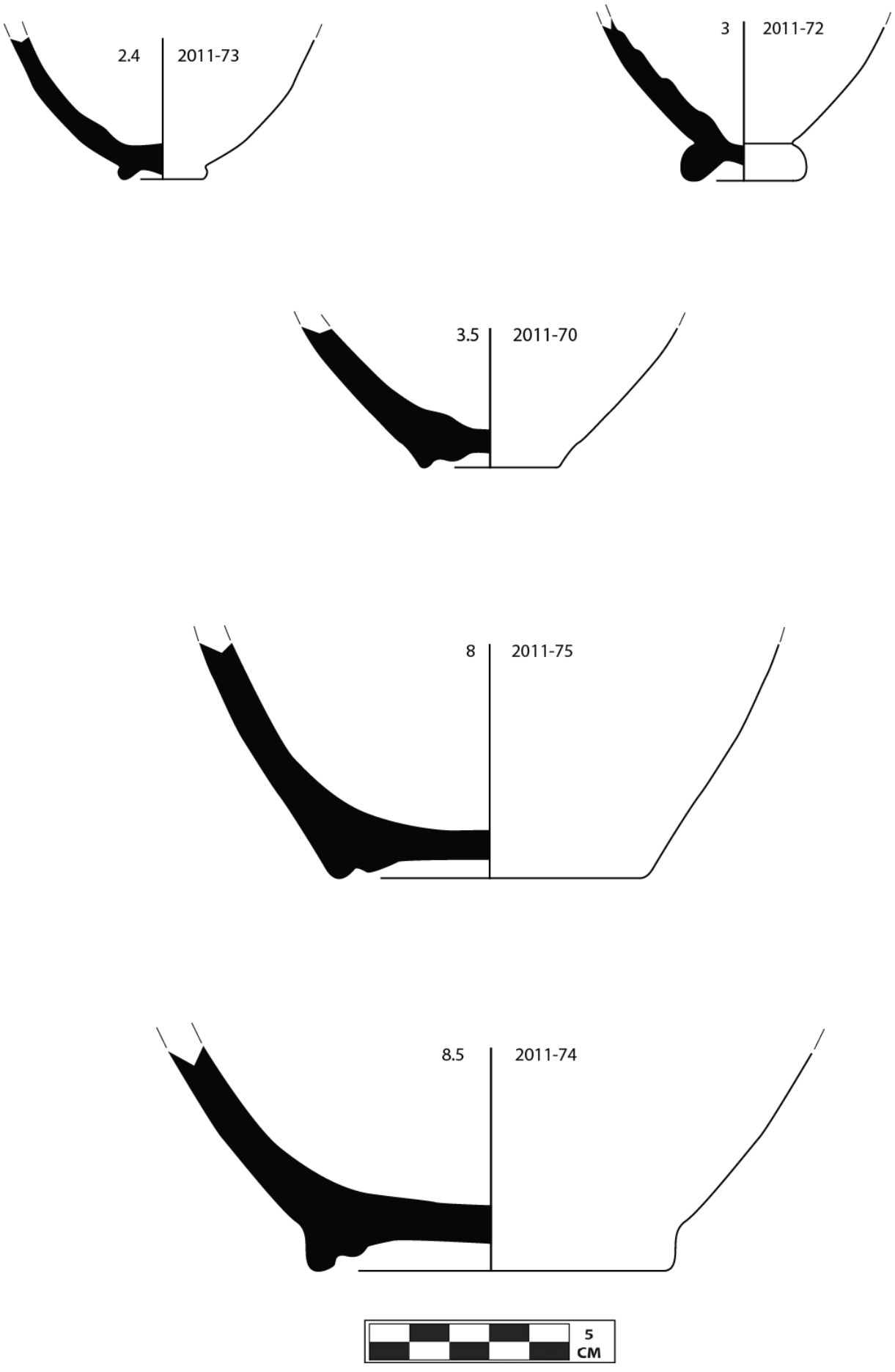

3.7
2011-69
3.4
2011-68
5
2011-02
3.5
2011-80
1
2011-67
2.5
2011-71
5
CM

Plate 33 base

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
2011-73	K7	-	-	1A	T.p.10	H	Rim diameter: - Base diameter: 2.4 cm Height: - Status: base Comparison:	Firing: SU Color in: P24 Color out: S7 Mark of burning: O Temperature: H	Rim: - Neck:- Body: - Base: 2008
2011-72	K7	-	-	IA	T.p.10	H	Rim diameter: - Base diameter: 3 cm Height: - Status: base Comparison:	Firing: SU Color in:P24 Color out: S22 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: 2008
2011-70	K7	-	-	IA	T.p.10	H	Rim diameter: - Base diameter: 3.5 cm Height: - Status: base Comparison:	Firing: SU Color in:P24 Color out: S7 Mark of burning: O Temperature: L	Rim: - Neck:- Body:- Base: 2008
2011-75	K7	-	-	1A	T.p.10	H	Rim diameter: - Base diameter: 8 cm Height: - Status: base Comparison:	Firing: SU Color in: P24 Color out: S7 Mark of burning: O Temperature: H	Rim: - Neck:- Body: - Base: 2008
2011-74	K7	-	-	IA	T.p.10	H	Rim diameter: - Base diameter: 8.5 cm Height: - Status: base Comparison:	Firing: SU Color in:P24 Color out: S7 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: 2008


2.4
2011-73
3
2011-72
3.5
2011-70
8
2011-75
8.5
2011-74
5
CM

Neo Assyrian Plate 34 Bowl with convex wall and protruding rim

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
00566	A	A031	E31	-	T.p.3	A3	Rim diameter: 26 cm Base diameter:- Height: - Status: rim Comparison: Harran Plain (Coşkun, N. 2016, fig.2:1)	Firing: M Color in: P17 Color out: S16 Mark of burning: O Temperature: H	Rim: 106 Neck:- Body:600 Base: -
00624	C	A038	E38	-	T.p.3	A3	Rim diameter: 22 cm Base diameter:- Height: - Status: rim Comparison: Tell Ahmar (Jamieson 1999, fig.1: 12)	Firing: M Color in: P9 Color out: S9 Mark of burning: O Temperature: H	Rim: 106 Neck:- Body:600 Base: -
00544	A	A046	E46	-	T.p.3	A3	Rim diameter: 22 cm Base diameter:- Height: - Status: rim Comparison: Tall Šēh Hamad (Kreppner, 2006, Taf 48.4)	Firing: M Color in: P16 Color out: S15 Mark of burning: O Temperature: H	Rim: 106 Neck:- Body:600 Base: -
00577	A	A031	E31	-	T.p.7	E	Rim diameter: 12 cm Base diameter:- Height: - Status: rim comparison :	Firing: SU Color in: P9 Color out: S9 Mark of burning: O Temperature: H	Rim: 122 Neck:- Body:600 Base: -
00638	C	C068	E68	-	T.p.10	H	Rim diameter: 10 cm Base diameter:- Height: - Status: rim Comparison:	Firing: M Color in: P24 Color out: S22 Mark of burning: O Temperature: H	Rim: 106 Neck:- Body:600 Base: -
00066	A	A001	E68	9	T.p.10	H	Rim diameter: 12 cm Base diameter:- Height: - Status: rim Comparison:	Firing: M Color in: P6 Color out: S18 Mark of burning: SO Temperature: M	Rim: 120 Neck:- Body:600 Base: -

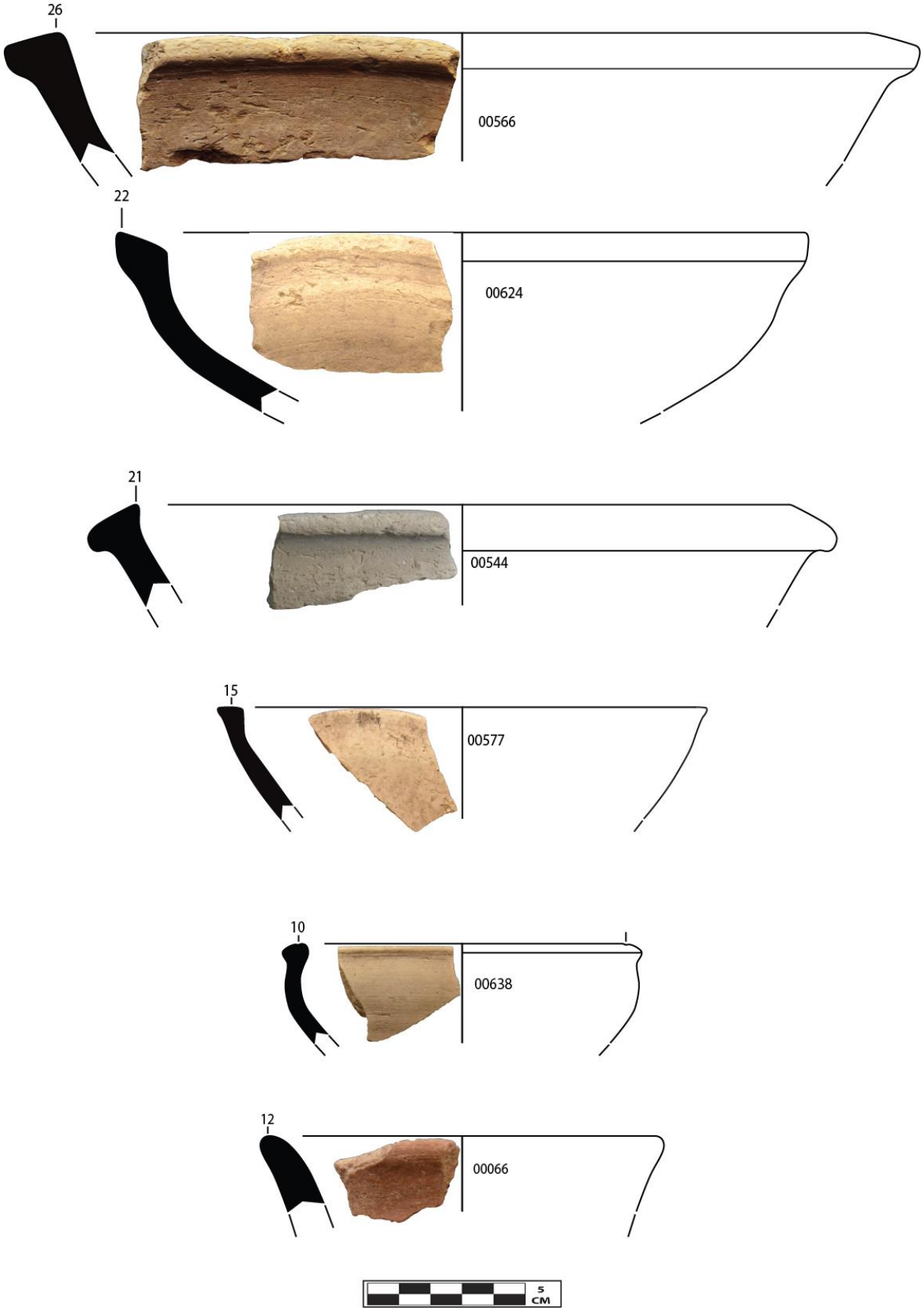

26
00566
22
00624
21
00544
15
00577
10
1
00638
12
00066
5
CM

Plate 35, Bowl with convex wall, Beveled outside, hammered, square folded

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
00567	A	A031	E31	-	T.p.9	G	Rim diameter: 25 cm Base diameter:- Height: - Status: rim Comparison: Tall Šēh Hamad (Kreppner, 2006, Taf 51.7)	Firing: M Color in: P9 Color out: S9 Mark of burning: O Temperature: H	Rim: 104 Neck:- Body:600 Base: -
00626	C	A038	E38	-	T.p.3	A3	Rim diameter: 12 cm Base diameter:- Height: - Status: rim Comparison: Tall Šēh Hamad (Kreppner, 2006, Taf 51.6)	Firing: SU Color in: P25 Color out: S24 Mark of burning: O Temperature: H	Rim: 104 Neck:- Body:600 Base: -
00547	A	C046	E46	-	T.p.10	H	Rim diameter: 22 cm Base diameter:- Height: - Status: rim Comparison: Harran Plain (Coşkun, N. 2016, fig.3:8)	Firing: M Color in: P15 Color out: S14 Mark of burning: O Temperature: H	Rim: 111 Neck:- Body:600 Base: -
2012-139	L7	-	-	1	T.p.7	E	Rim diameter: 17 cm Base diameter:- Height: - Status: rim Comparison: Nimrud (Oates, 1959, plate 35.3)	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: 111 Neck:- Body:600 Base: -
2012-90	L7	-	-	1	T.p.3	A3	Rim diameter: 25 cm Base diameter:- Height: - Status: rim Comparison: Nimrud (Oates, 1959, plate 35.24)	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: 108 Neck:- Body:600 Base: -
00401	A	A027	E27	-	T.p.10	H	Rim diameter: 21 cm Base diameter:- Height: - Status: rim Comparison:	Firing: M Color in: P24 Color out: S22 Mark of burning: O Temperature: H	Rim:108 Neck:- Body:600 Base: -
00487	A	A034	E34	-	T.p.3	A3	Rim diameter: 21 cm Base diameter:- Height: - Status: rim Comparison: Tell Ahmar (Jamieson 1999, fig.1: 11)	Firing: M Color in: P3 Color out: S22 Mark of burning: O Temperature: H	Rim: 101 Neck:- Body:600 Base: -

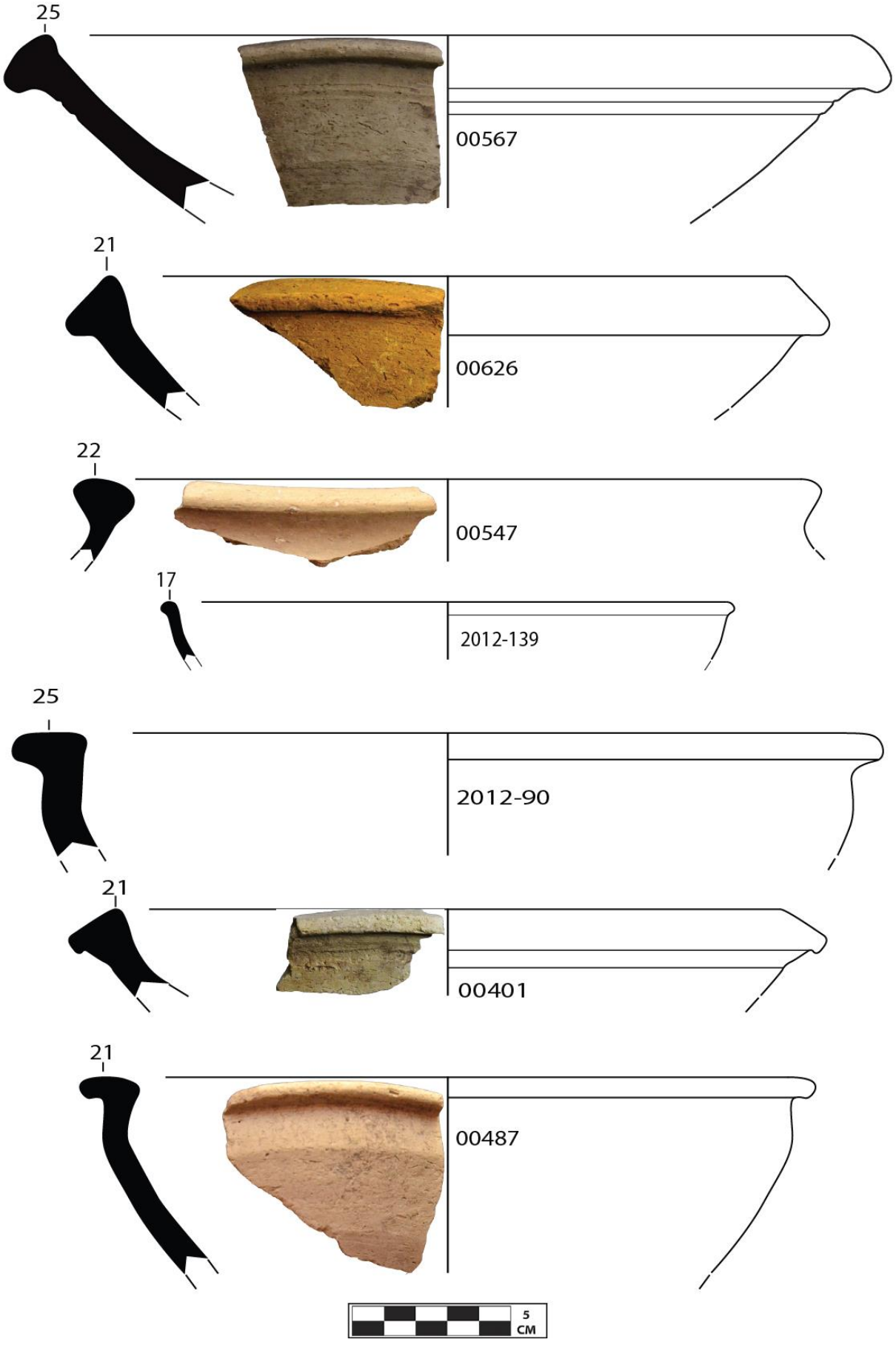

25
00567
21
00626
22
00547
17
2012-139
25
2012-90
21
00401
21
00487
5
CM

Plate 36 Bowl with convex wall with different rims

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
00081	A	A001	E01	-	T.p.5	C	Rim diameter: 23 cm Base diameter:- Height: - Status: rim Comparison: Nimrud (Oates, 1959, plate 35:22)	Firing: M Color in: P7 Color out: S7 Mark of burning: O Temperature: H	Rim: 105 Neck:- Body:600 Base: -
2012-85	L7	-	-	I	T.p.3	A3	Rim diameter: 23 cm Base diameter:- Height: - Status: rim Comparison:	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: 105 Neck:- Body:600 Base: -
2012-129	L7	-	-	I	T.p.3	A3	Rim diameter: 20 cm Base diameter:- Height: - Status: rim Comparison: Harran Plain (Coşkun, N. 2016, fig.4:1)	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: 113 Neck:- Body:600 Base: -
00218	A	A013	E13	-	T.p.10	H	Rim diameter: 20 cm Base diameter:- Height: - Status: rim Comparison: Harran Plain (Coşkun, N. 2016, fig.7:8)	Firing: SO Color in: P4 Color out: S4 Mark of burning: SO Temperature: M	Rim: 103 Neck:- Body:600 Base: -
2012-133	L7	-	-	I	T.p.3	A3	Rim diameter: 17 cm Base diameter:- Height: - Status: rim Comparison:	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: 120 Neck:- Body:600 Base: -
00635	C	C067	E67	-	T.p.9	G	Rim diameter: 16 cm Base diameter:- Height: - Status: rim Comparison:	Firing: M Color in: P12 Color out: S13 Mark of burning: O Temperature: H	Rim: 121 Neck:- Body:600 Base: -

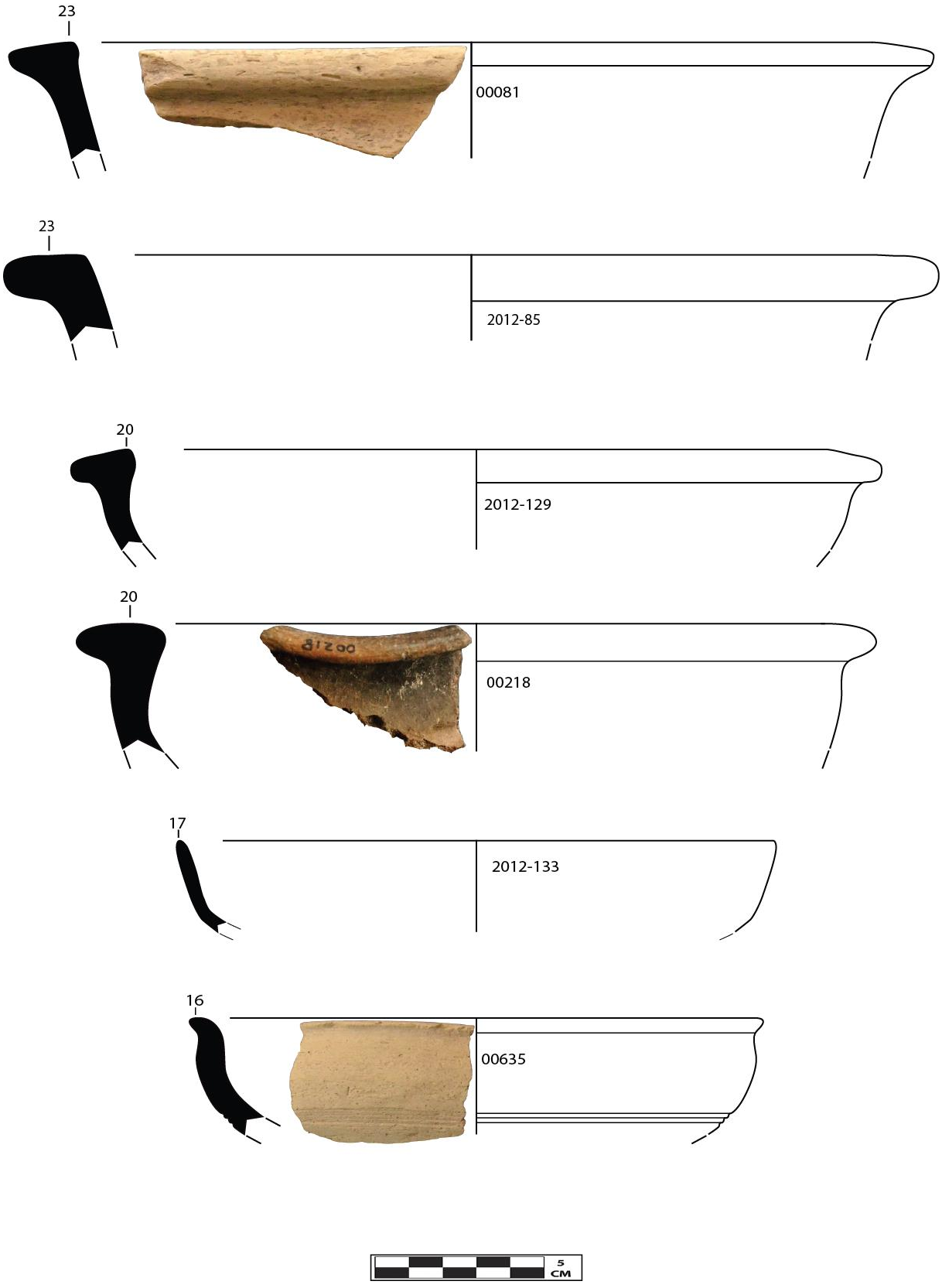

23
00081
23
2012-85
20
2012-129
20
81200
00218
17
2012-133
16
00635
5
CM

Plate 37, Bowl with convex wall , beveled outside bent and one square rim

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
2012-146	L7	-	-	1	T.p.3	A3	Rim diameter: 20 cm Base diameter:- Height: - Status: rim Comparison: Harran Plain (Coşkun, N. 2016, fig.4:2)	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: 102 Neck:- Body:600 Base: -
2012-148	L7	-	-	1	T.p.3	A3	Rim diameter: 21 cm Base diameter:- Height: - Status: rim Comparison: Tall Šēh Hamad (Kreppner, 2006, Taf 52.12)	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: 102 Neck:- Body:600 Base: -
2012-99	L7	-	-	I	T.p.3	A3	Rim diameter: 18 cm Base diameter:- Height: - Status: rim Comparison: Harran Plain (Coşkun, N. 2016, fig.4:3)	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: 102 Neck:- Body:600 Base: -
2010-03	O13	-	-	II	T.p.10	H	Rim diameter: 8 cm Base diameter:6.4 cm Height: 5 cm Status: complete Comparison:	Firing: M Color in: P24 Color out: S22 Mark of burning: O Temperature: H	Rim: 109 Neck:- Body:600 Base: -

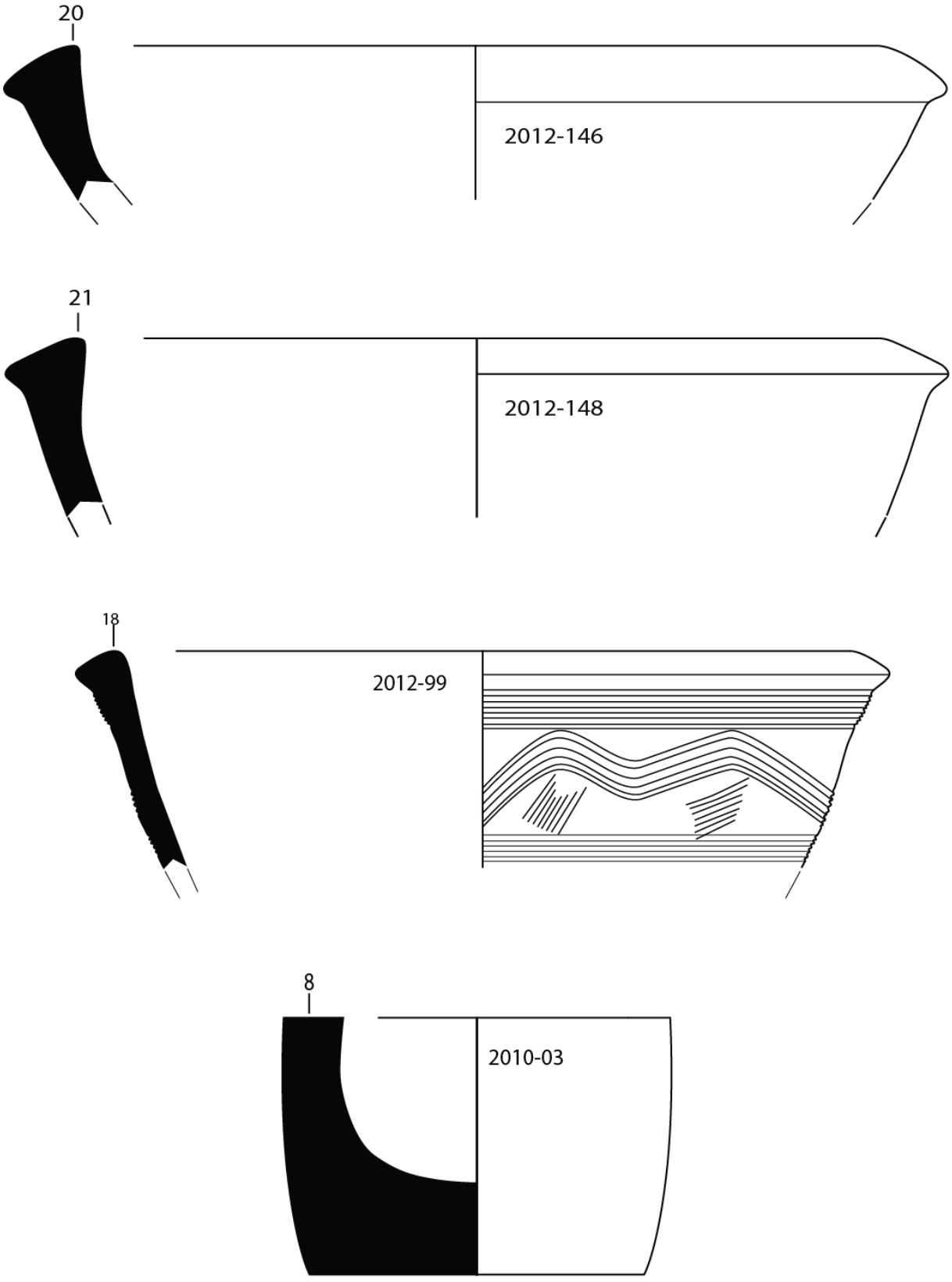

20
2012-146
21
2012-148
18
2012-99
8
2010-03
5
CM

Plate 38 carinated bowl

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
00221	A	A013	E13	-	T.p.10	H	Rim diameter: 27 cm Base diameter:- Height: - Status: rim Comparison: Khirbat Khatuniyah (Curtis - Green 1997, fig.55, 359.	Firing: M Color in: P24 Color out: S22 Mark of burning: O Temperature: H	Rim: 119 Neck:- Body:601 Base: -
00608	A	A067	E67	-	T.p.7	E	Rim diameter: 18 cm Base diameter:- Height: - Status: rim Comparison: Tell Abu Dhahir (Green 1999, fig. 5, 16)	Firing: M Color in: P16 Color out: S15 Mark of burning: O Temperature: M	Rim: 119 Neck:- Body:601 Base: -
00486	A	A034	E34	-	T.p.6	D	Rim diameter: 30 cm Base diameter:- Height: - Status: rim Comparison:	Firing: M Color in: P22 Color out: S22 Mark of burning: O Temperature: H	Rim: 105 Neck:- Body:601 Base: -
00726	A	A075	E75	-	T.p.10	H	Rim diameter: 20 cm Base diameter:- Height: - Status: rim Comparison:	Firing: M Color in: P24 Color out: S22 Mark of burning: O Temperature: H	Rim: 105 Neck:- Body:601 Base: -
2012-132	L7	-	-	1	T.p.3	A3	Rim diameter: 18 cm Base diameter:- Height: - Status: rim Comparison: Harran Plain (Coşkun, N. 2016, fig.2:7)	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: 112 Neck:- Body:601 Base: -
2012-134	L7	-	-	1	T.p.3	A3	Rim diameter: 18 cm Base diameter:- Height: - Status: rim Comparison: Nimrud (Oates 1959, pl.36, 27)	Firing: M Color in: P17 Color out: S3 Mark of burning: O Temperature: H	Rim: 111 Neck:- Body:601 Base: -
00639	A	A067	E67	-	T.p.6	D	Rim diameter: 18 cm Base diameter:- Height: - Status: rim Comparison: Harran Plain (Coşkun, N. 2016, fig. 5:11)	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: 119 Neck:- Body:601 Base: -

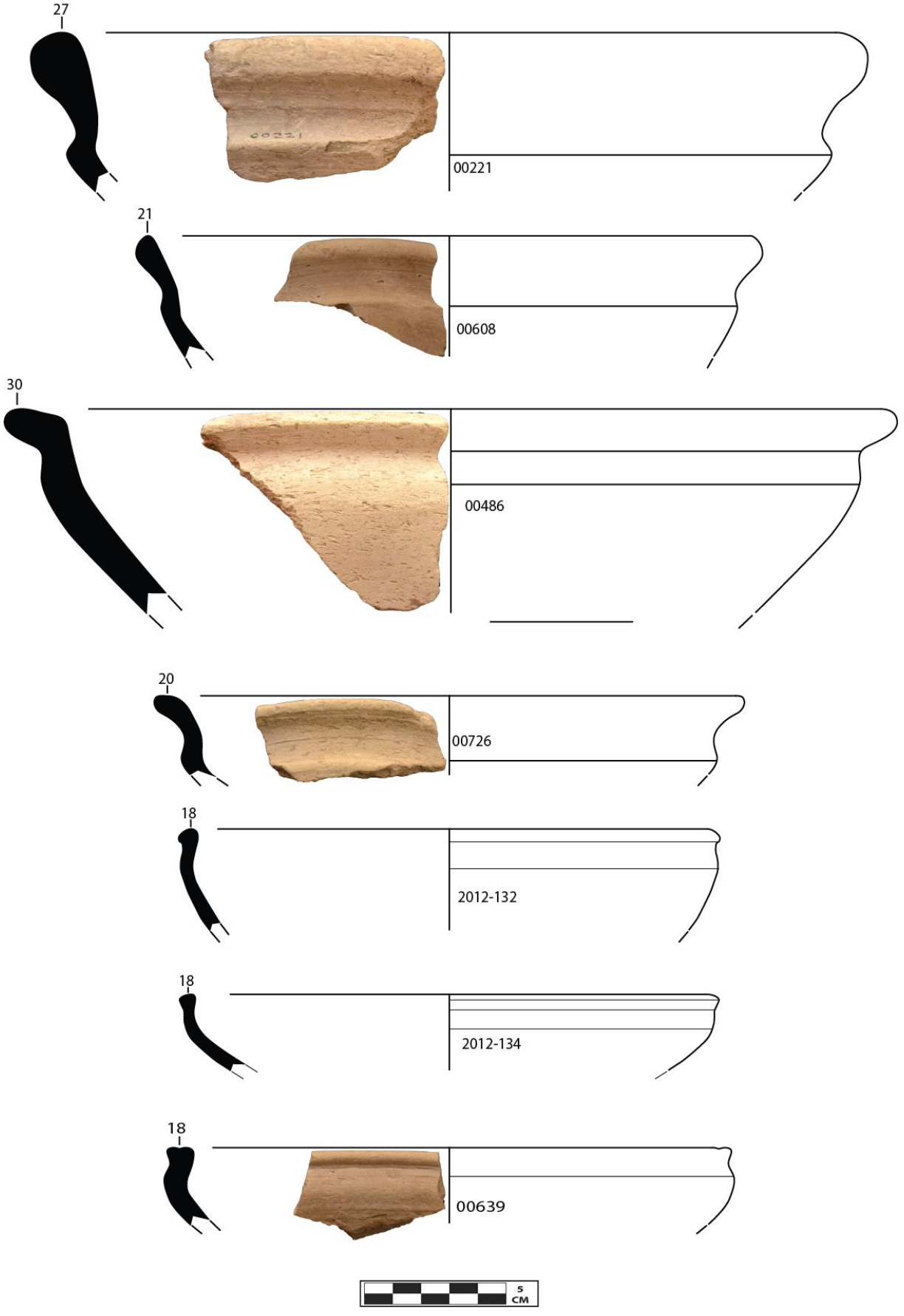
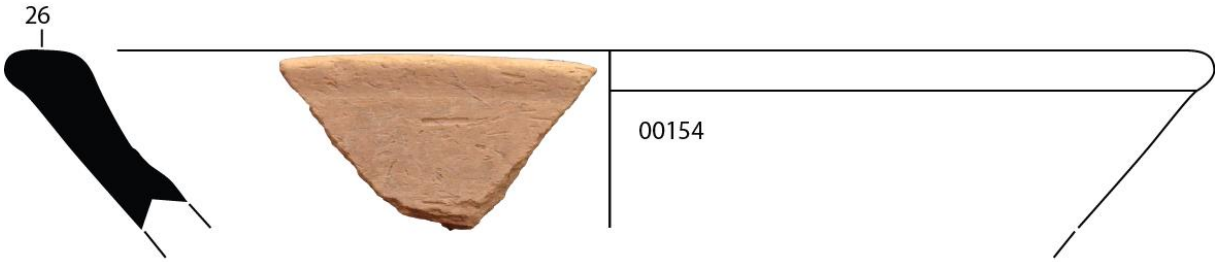
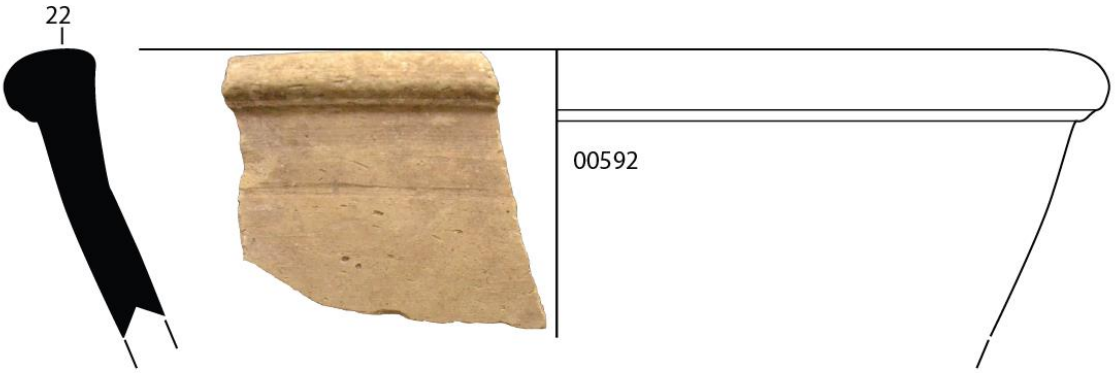

27
00221
21
00608
30
00486
20
00726
18
2012-132
18
2012-134
18
00639
5 CM

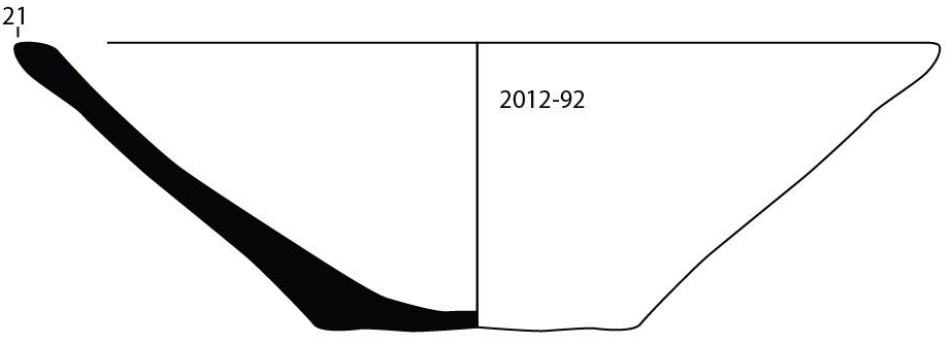
Plate 39 flaring bowl

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
00154	A	A006	E06	-	T.p.7	E	Rim diameter: 27 cm Base diameter:- Height: - Status: rim Comparison:	Firing: M Color in: P21 Color out: S5 Mark of burning: O Temperature: H	Rim: 119 Neck:- Body:602 Base: -
00560	A	A044	E44	-	T.p.7	E	Rim diameter: 18 cm Base diameter:- Height: - Status: rim Comparison: Khirbat Khatuniyah (Curtis - Green 1997,fig. 56, 363)	Firing: M Color in: P5 Color out: S6 Mark of burning: O Temperature: M	Rim: 101 Neck:- Body:602 Base: -
00592	A	A041	E41	-	T.p.9	G	Rim diameter: 30 cm Base diameter:- Height: - Status: rim Comparison: Harran Plain (Coşkun, N. 2016, fig.2: 2)	Firing: M Color in: P9 Color out: S9 Mark of burning: O Temperature: H	Rim: 105 Neck:- Body:602 Base: -
2012-92	L7	-	-	I	T.p.10	H	Rim diameter: 21 cm Base diameter:7 Height: 6.5 Status: complete Comparison: Dinkha Tepe, (Muscarella 1974, p 45, fig.893)	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: 120 Neck:- Body:602 Base: 202


26
00154


13
00560


22
00592


21
2012-92


5
CM

Plate 40 Basin and strainer

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension	Ware and Remarks	Typology of shapes
00346	A	A027	E27	-	T.p.1	A1	Rim diameter: 51 cm Base diameter:- Height: - Status: rim Comparison:	Firing: M Color in: P24 Color out: S17 Mark of burning: O Temperature: H	Rim: 109 Neck:- Body: Base: -
00152	A	A006	E06	-	T.p.1	A1	Rim diameter: 43 cm Base diameter:32 Height: 8cm Status: rim Comparison:	Firing: M Color in: P22 Color out: S2 Mark of burning: SO Temperature: M	Rim: 109 Neck:- Body: Base:
00579	A	A031	E31	-	T.p.7	E	Rim diameter: 14 cm Base diameter:- Height: - Status: rim Comparison:	Firing: M Color in: P9 Color out: S9 Mark of burning: O Temperature: H	Rim: 101 Neck:- Body: Base: -

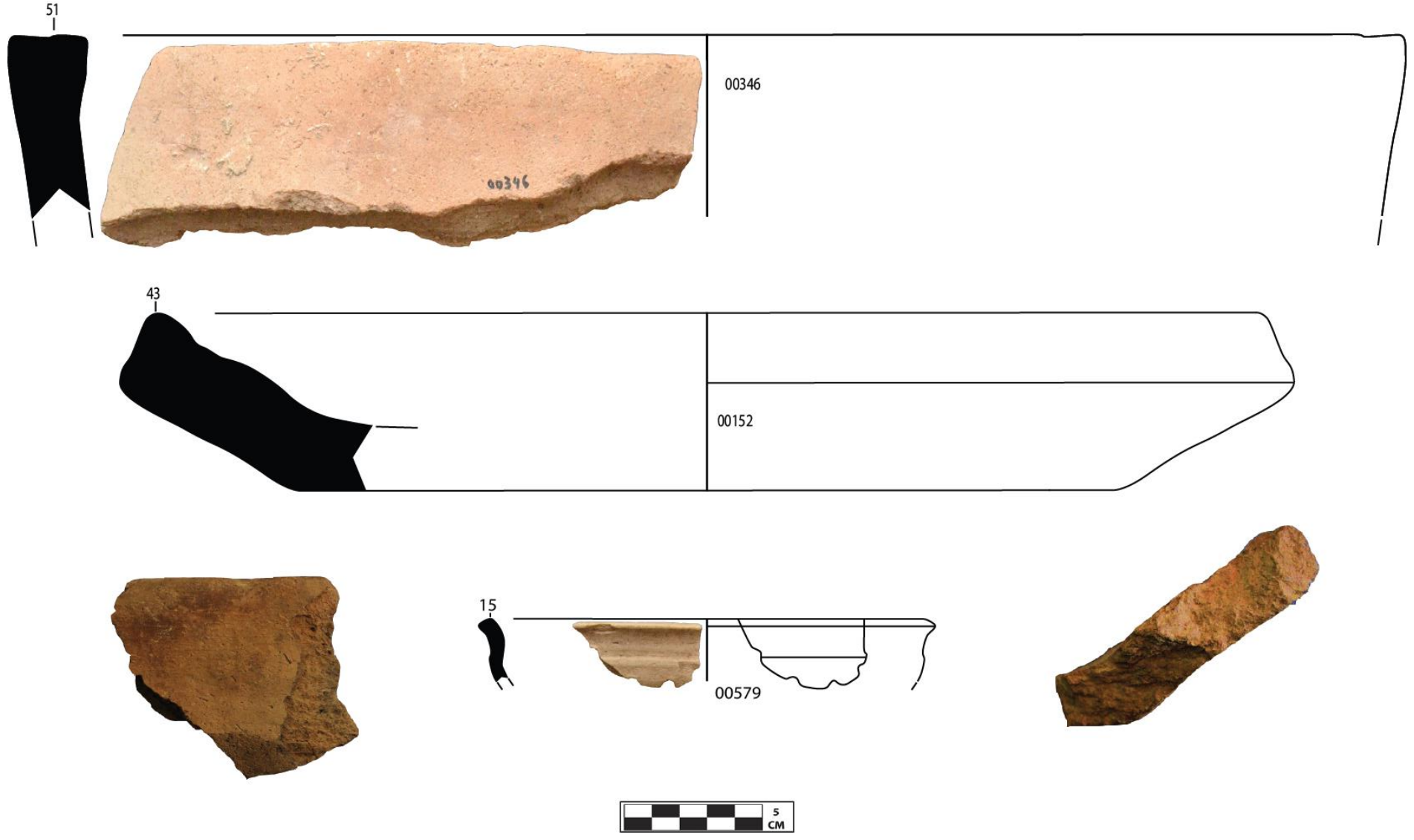

51
00346
00346
43
00152
15
00579
5
CM

Plate 41 Goblets

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
00642	C	C068	E68	-	T.p.10	H	Rim diameter: 9 cm Base diameter:- Height: - Status: rim Comparison:	Firing: SU Color in: P17 Color out: S16 Mark of burning: O Temperature: H	Rim: 108 Neck:- Body:502 Base: -
00643	C	A006	E06	-	T.p.10	H	Rim diameter: 8 cm Base diameter:- Height:- Status: rim Comparison:	Firing: SU Color in: P17 Color out: S16 Mark of burning: O Temperature: H	Rim: 121 Neck:- Body:502 Base:
2012-128	L7	-	-	I	T.p.10	H	Rim diameter: 7 cm Base diameter:- Height: - Status: rim Comparison: Nimrud; Oates . 1959, pl. 36, 42)	Firing: SU Color in: P23 Color out: 21 Mark of burning: O Temperature: H	Rim: 114 Neck:- Body:502 Base: -
00596	A	A041	E41	-	T.p.10	H	Rim diameter: 12 cm Base diameter:- Height:- Status: rim Comparison: Nimrud (Oates 1959, pl. 37, 58)	Firing: M Color in: P22 Color out: S24 Mark of burning: O Temperature: M	Rim: 115 Neck:- Body:500 Base:
00723	A	A006	E06	-	T.p.10	H	Rim diameter: 12 cm Base diameter:- Height:- Status: rim Comparison:	Firing: M Color in: P3 Color out: S22 Mark of burning: SO Temperature: M	Rim: 101 Neck:- Body:500 Base:
2012-94	L7	-	-	I	T.p.10	H	Rim diameter: 8 cm Base diameter:- Height: - Status: rim Comparison:	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: 101 Neck:- Body: Base: -
00634	A	A006	E06	-	T.p.10	H	Rim diameter: 12 cm Base diameter:- Height:- Status: rim Comparison:	Firing: M Color in: P3 Color out: S22 Mark of burning: SO Temperature: M	Rim: 101 Neck:- Body:501 Base:
00644	A	A006	E06	-	T.p.10	H	Rim diameter: 12 cm Base diameter:- Height:- Status: rim Comparison: Nimrud, Oates 1959, pl. 36, 49)	Firing: M Color in: P3 Color out: S22 Mark of burning: SO Temperature: M	Rim: 101 Neck:- Body:503 Base:
2012-88	L7	-	-	I	T.p.10	H	Rim diameter: 8 cm Base diameter:- Height: - Status: rim Comparison:	Firing: SU Color in: P23 Color out: 21 Mark of burning: O Temperature: H	Rim: 102 Neck:- Body:500 Base: -
2012-126	L7	-	-	I	T.p.10	H	Rim diameter: 8 cm Base diameter:- Height:- Status: rim	Firing: SU Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: 114 Neck:- Body:502 Base:
2012-137	L7	-	-	I	T.p.10	H	Rim diameter: 11 cm Base diameter:- Height: - Status: rim Comparison: Nimrud; Oates . 1959, pl. 36, 43)	Firing: SU Color in: P23 Color out: 21 Mark of burning: O Temperature: H	Rim: 118 Neck:- Body:502 Base: -

2013-03	J6	-	-	I	T.p.10	H	Rim diameter: 8 cm Base diameter:- Height: - Status: rim Comparison:	Firing: SU Color in: P24 Color out: 22 Mark of burning: O Temperature: H	Rim: 102 Neck:- Body:500 Base: 202

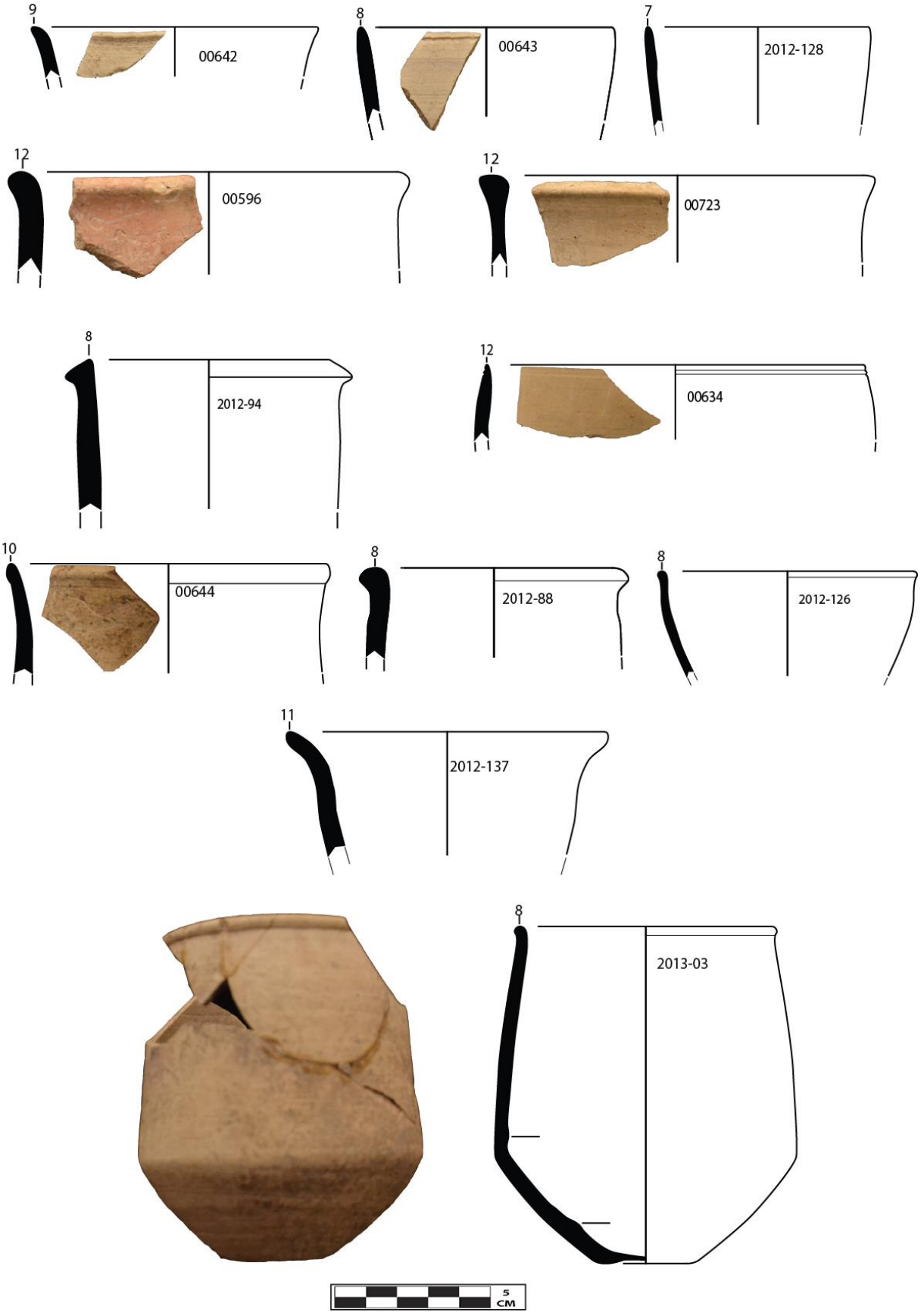

9
00642
8
00643
7
2012-128
12
00596
12
00723
8
2012-94
12
00634
10
00644
8
2012-88
8
2012-126
11
2012-137
8
2013-03
5
CM

Plate 42 pots without neck

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
00153	A	A006	E06	-	T.p.6	D	Rim diameter: 20 cm Base diameter:- Height: - Status: rim comparison :	Firing: SO Color in: P22 Color out: S20 Mark of burning: SO Temperature: H	Rim: 108 Neck:- Body: Base: -
00398	A	A027	E27	-	T.p.6	D	Rim diameter: 28 cm Base diameter:- Height:- Status: rim Comparison: Karkamish (Bonomo – Federrico, 2014, fig.6: 9)	Firing: M Color in: P24 Color out: S20 Mark of burning: O Temperature: M	Rim: 108 Neck:- Body: Base:
00047	A	A001	E01	-	T.p.6	D	Rim diameter: 20 cm Base diameter:- Height: - Status: rim Comparison:	Firing: M Color in: P17 Color out: S20 Mark of burning: O Temperature: H	Rim: 108 Neck:- Body: Base: -
00556	A	A044	E44	-	T.p.6	D	Rim diameter: 24 cm Base diameter:- Height: - Status: rim Comparison: Harran Plain (Coşkun, N. 2016, fig.7:11)	Firing: M Color in: P9 Color out: S9 Mark of burning: O Temperature: H	Rim: 105 Neck:- Body: Base: -
00586	A	A078	E78	-	T.p.6	H	Rim diameter: 26 cm Base diameter:- Height:- Status: rim Comparison: Karkamish (Bonomo – Federrico, 2014, fig.6: 3)	Firing: M Color in: P25 Color out: S24 Mark of burning: O Temperature: M	Rim: 119 Neck:- Body: Base:
00663	C	C056	E56	-	T.p.6	D	Rim diameter: 20 cm Base diameter:- Height: - Status: rim Comparison:	Firing: M Color in: P24 Color out: 20 Mark of burning: O Temperature: H	Rim: 100 Neck:- Body: Base: -
00803	A	A082	E82	-	T.p.6	D	Rim diameter: 22 cm Base diameter:- Height: - Status: rim Comparison:	Firing: M Color in: P22 Color out: S20 Mark of burning: O Temperature: H	Rim: 114 Neck:- Body: Base: -

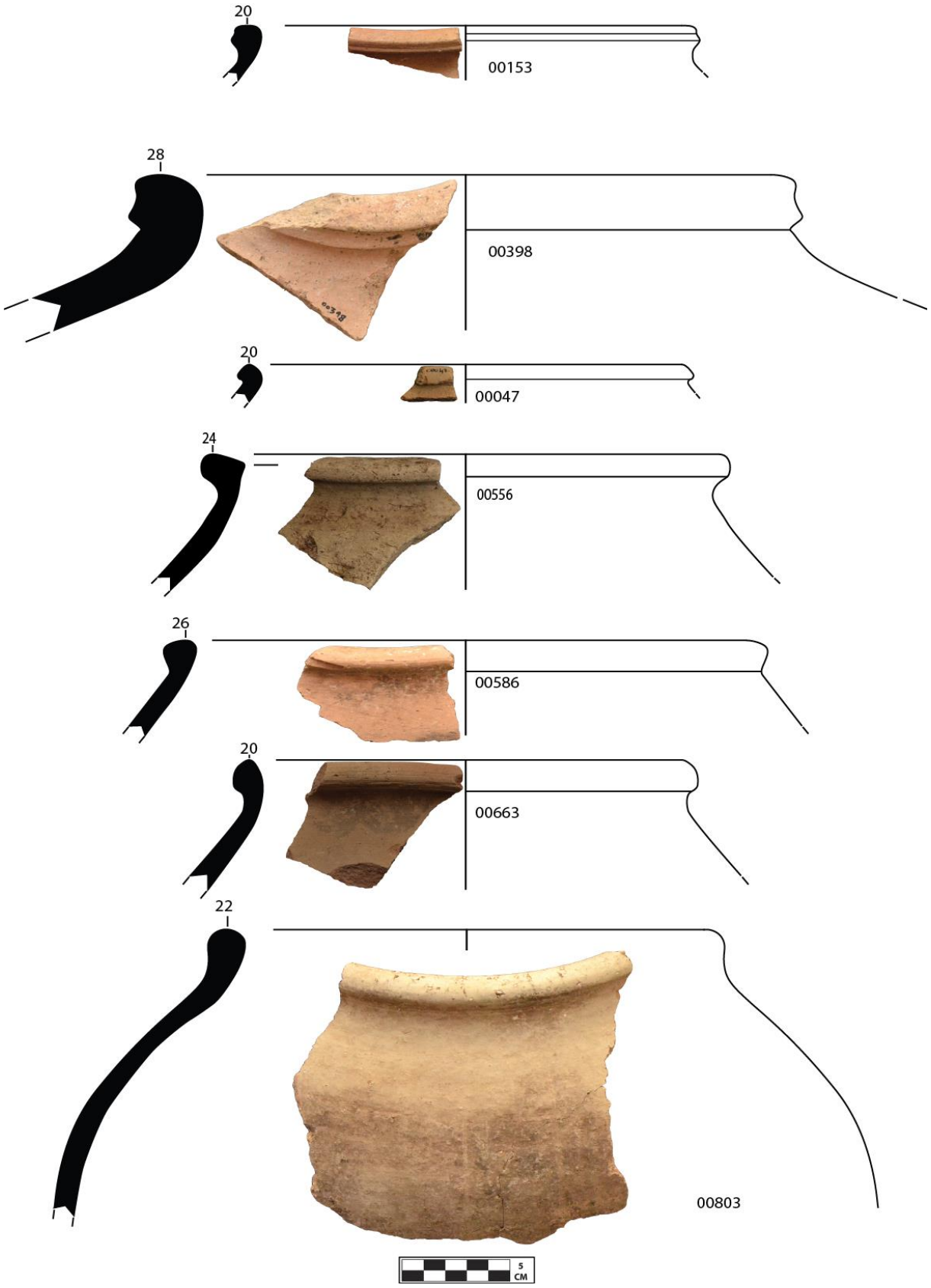

20
00153
28
00398
20
00047
24
00556
26
00586
20
00663
22
00803
5 CM

Plate 43 pots without neck

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
00561	A	A044	E44	-	T.p.6	D	Rim diameter: 22 cm Base diameter:- Height: - Status: rim Comparison: Karkamish (Bonomo – Federrico, 2014, fig.6: 10)	Firing: M Color in: P8 Color out: S2 Mark of burning: O Temperature: M	Rim: 105 Neck:- Body: Base: -
00597	A	A067	E67	-	T.p.6	D	Rim diameter: 22 cm Base diameter:- Height:- Status: rim Comparison:	Firing: M Color in: P3 Color out: S16 Mark of burning: O Temperature: M	Rim: 119 Neck:- Body: Base:
00619	C	C038	E38	-	T.p.10	H	Rim diameter: 30 cm Base diameter:- Height: - Status: rim Comparison:	Firing: M Color in: P10 Color out: S9 Mark of burning: O Temperature: H	Rim: 106 Neck:- Body: Base: -
00009	A001	E01	-	-	T.p.5	C	Rim diameter: 28 cm Base diameter:- Height: - Status: rim	Firing: M Color in: P8 Color out: S2 Mark of burning: O Temperature: M	Rim: 108 Neck:- Body: Base: -
00551	A044	E44	-	-	T.p.10	H	Rim diameter: 30cm Base diameter:- Height: - Status: rim Comparison: Karkamish (Bonomo – Federrico, 2014, fig.6: 12)	Firing: M Color in: P17 Color out: S16 Mark of burning: O Temperature: M	Rim: 119 Neck:- Body: Base: -

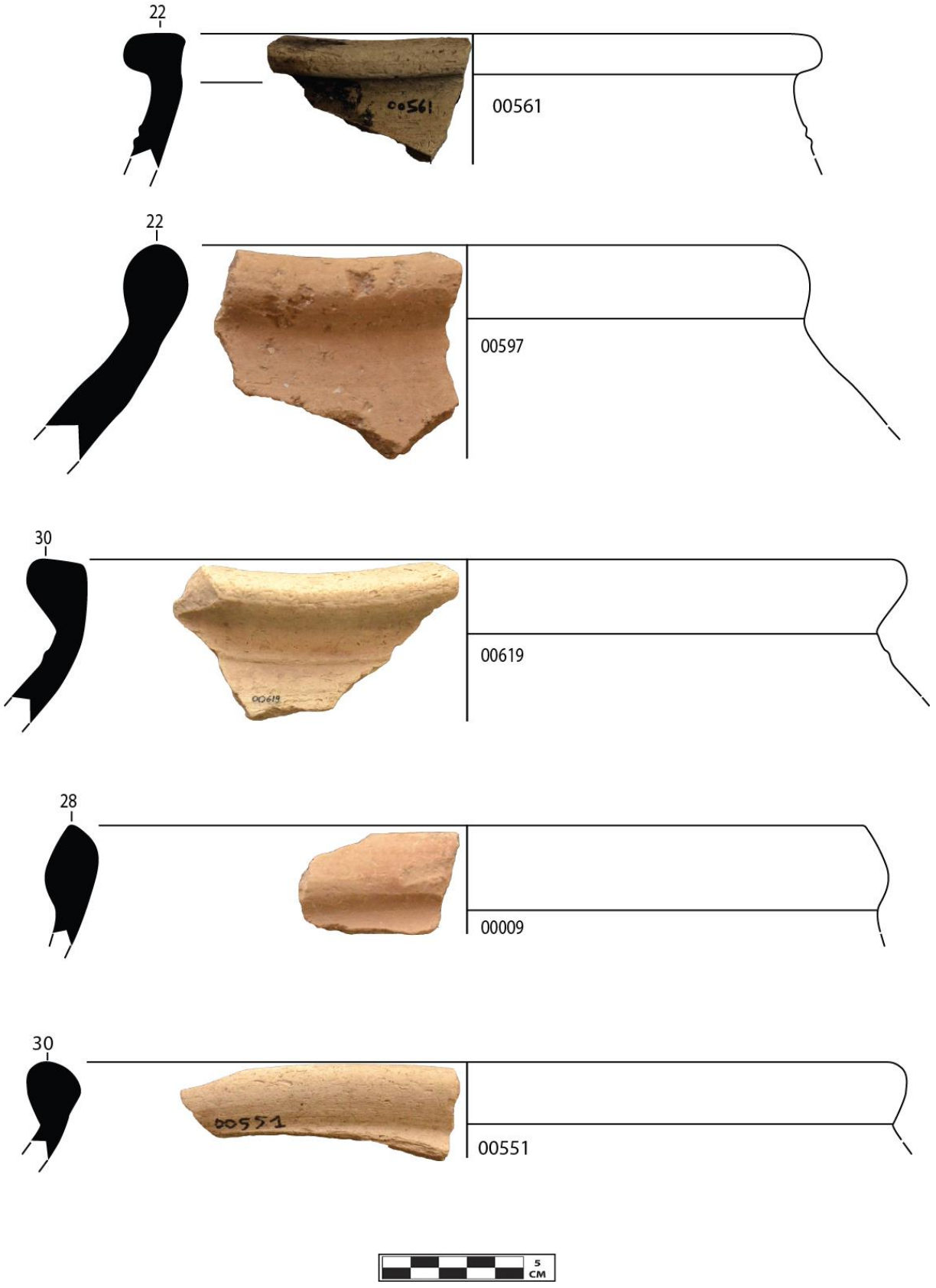

22
00561
00561
22
00597
00597
30
00619
00619
28
00009
00009
30
00551
00551
5
CM

Plate 44 Pots with concave Neck

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
00513	C	A045	E45	-	T.p.3	A3	Rim diameter: 27 cm Base diameter:- Height: - Status: rim Comparison:	Firing: M Color in: P15 Color out: S14 Mark of burning: O Temperature: M	Rim: 106 Neck:- Body: Base: -
00601	A	A067	E67	-	T.p.6	D	Rim diameter: 22 cm Base diameter:- Height:- Status: rim Comparison:	Firing: M Color in: P25 Color out: S24 Mark of burning: O Temperature: M	Rim: 119 Neck:- Body: Base:
00802	A	A082	E82	-	T.p.9	G	Rim diameter: 22 cm Base diameter:- Height: - Status: rim Comparison: Karkamish (Bonomo - Federrico, 2014, fig.6: 5)	Firing: M Color in: P22 Color out: S20 Mark of burning: O Temperature: H	Rim: 100 Neck:- Body: Base: -
2011-82	M7	-	-	2	T.p.6	D	Rim diameter: 14 cm Base diameter:1.5 cm Height: 17 Status: complete Comparison:	Firing: M Color in: P23 Color out: S12 Mark of burning: SO Temperature: M	Rim: 116 Neck:- Body: Base: -

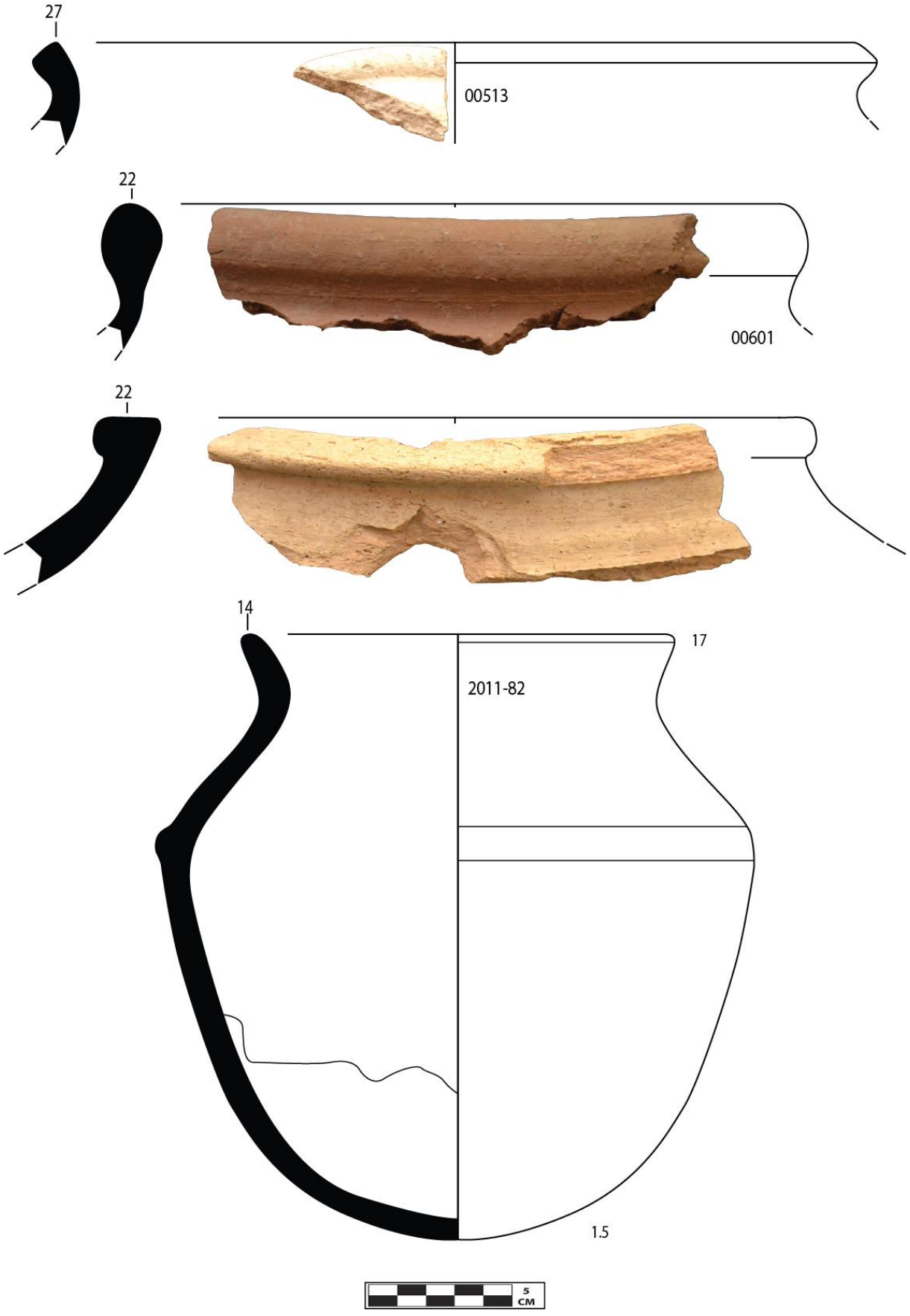

27
00513
22
00601
22
14
17
2011-82
1.5
5
CM

Plate 45 pots with concave neck

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
2012-141	L7	-	-	I	T.p.6	d	Rim diameter: 20 cm Base diameter:- Height: - Status: rim Comparison:	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: M	Rim: 108 Neck:- Body: Base: -
2012-97	L7-	-	-	I	T.p.6	D	Rim diameter: 22 cm Base diameter:- Height:- Status: rim Comparison:	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: M	Rim: 115 Neck:- Body: Base:
2012-96	L7	-	-	I	T.p.6	D	Rim diameter: 20 cm Base diameter:- Height: - Status: rim Comparison:	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: 103 Neck:- Body: Base: -

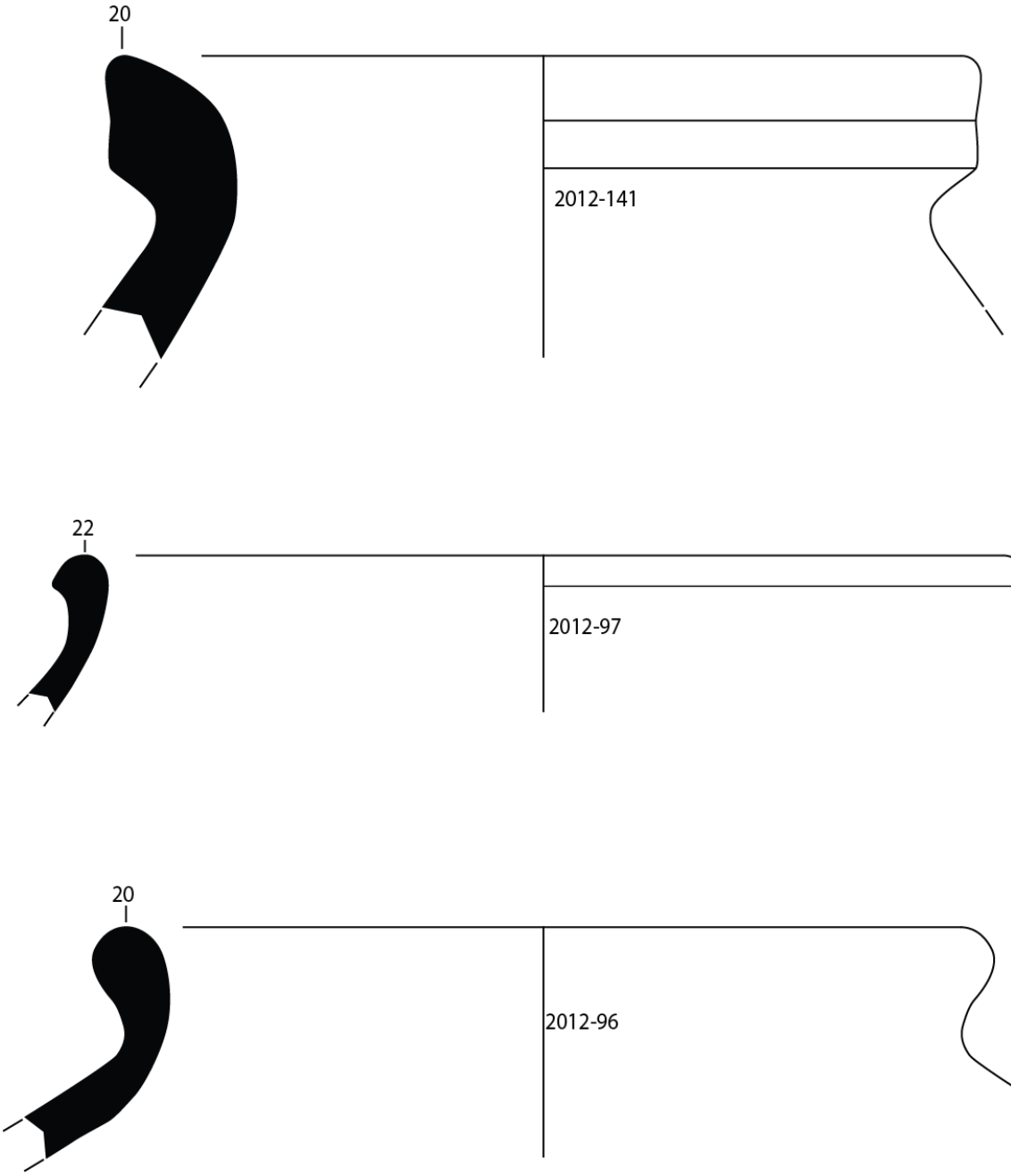

20
2012-141
22
2012-97
20
2012-96
5
CM

Plate 46 jars without neck

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
00006	A	A001	E01	-	T.p.7	E	Rim diameter: 16 cm Base diameter:- Height: - Status: rim Comparison: Tall Šēh Hamad (Kreppner, 2006, Taf 30.18)	Firing: SO Color in: P7 Color out: S7 Mark of burning: SO Temperature: L	Rim: 105 Neck:- Body:- Base: -
00054	A	A001	E01	-	T.p.7	E	Rim diameter: 13 cm Base diameter:- Height: - Status: rim Comparison: Tall Šēh Hamad (Kreppner, 2006, Taf 31.8)	Firing: M Color in: P7 Color out: S7 Mark of burning: O Temperature: H	Rim: 105 Neck:- Body:- Base: -
00576	A	A013	E13	-	T.p.9	G	Rim diameter: 18 cm Base diameter:- Height: - Status: rim Comparison: Tall Šēh Hamad (Kreppner, 2006, Taf 56.10)	Firing: M Color in: P9 Color out: S9 Mark of burning: O Temperature: H	Rim: 105 Neck:- Body:- Base: -
00050	A	A001	E01		T.p.7	E	Rim diameter: 14 cm Base diameter:- Height: - Status: rim Comparison:	Firing: M Color in: P6 Color out: S5 Mark of burning: O Temperature: H	Rim: 114 Neck:- Body:- Base: -
00645	C	C053	E53	-	T.p.3	A3	Rim diameter: 23 cm Base diameter:- Height: - Status: rim Comparison:	Firing: M Color in: P9 Color out: S16 Mark of burning: O Temperature: H	Rim: 105 Neck:- Body:- Base: -
2012-87	L.7	-	-	I	T.p.10	H	Rim diameter: 10 cm Base diameter:- Height: - Status: rim Comparison:	Firing: SU Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: 114 Neck:- Body:- Base: -

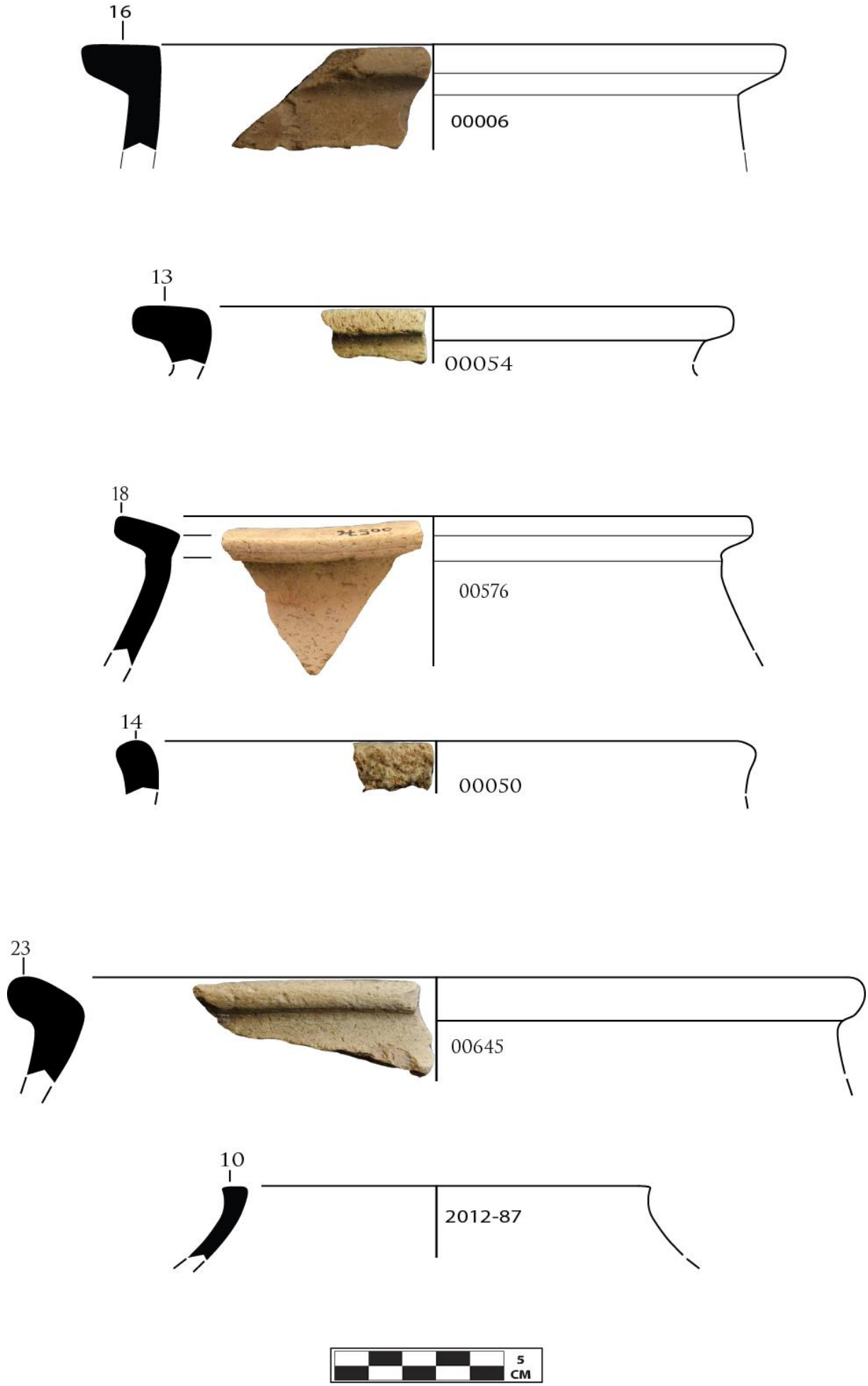
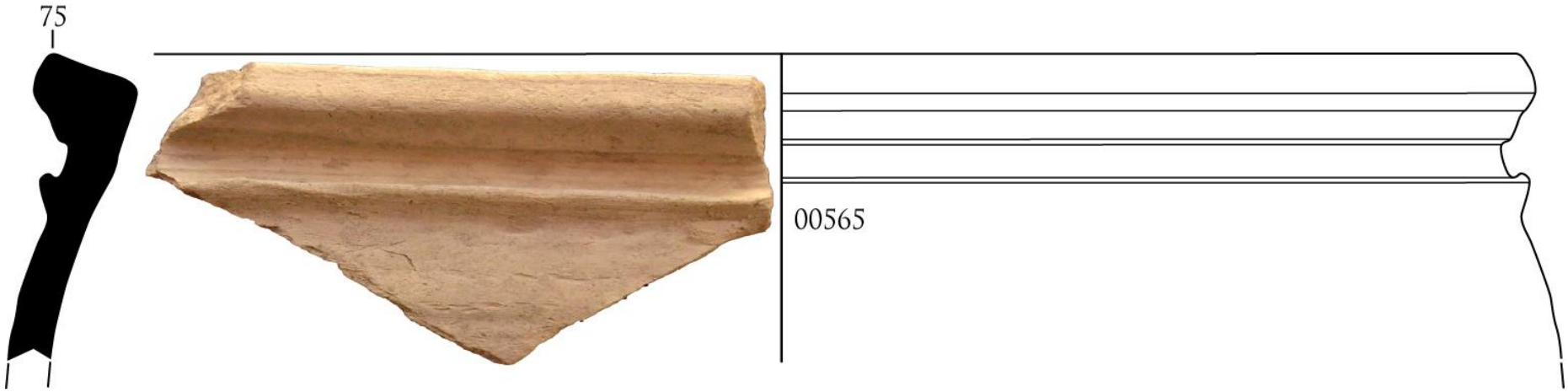
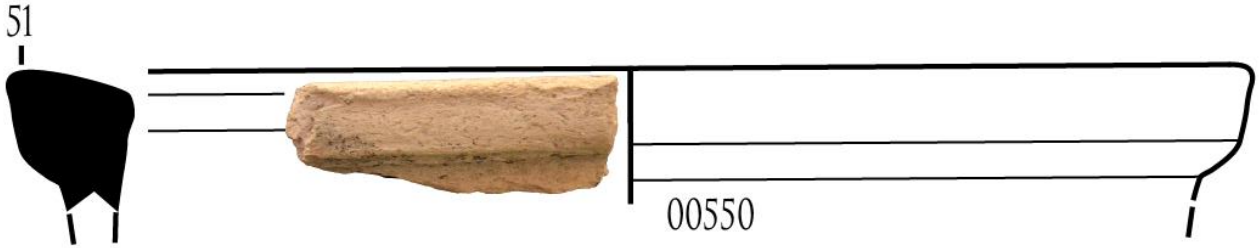

16
00006
13
00054
18
00576
14
00050
23
00645
10
2012-87
5
CM

Plate 47 jars without neck

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension	Ware and Remarks	Typology of shapes
00565	A	A018	E18	-	T.p.3	A3	Rim diameter: 75 cm Base diameter:- Height: - Status: rim Comparison: Karkamish (Bonomo – Federrico, 2014, fig.6: 11)	Firing: M Color in: P18 Color out: S17 Mark of burning: O Temperature: H	Rim: 105 Neck:- Body:- Base: -
00550	A	A044	E44	-	T.p.7	E	Rim diameter: 51 cm Base diameter:- Height: - Status: rim Comparison:	Firing: M Color in: P12 Color out: S13 Mark of burning: O Temperature: H	Rim: 100 Neck:- Body:- Base: -


75
00565


51
00550


5
CM

Plate 48 jars without neck

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
2011-11	M7	1	-	-	T.p.10	H	Rim diameter: 3.8 cm Base diameter:6.8 cm Height: 12.5 Status: complete Comparison: Dinkha Tepe, (Muscarella 1974, B10a, burial5, fig.36)	Firing: M Color in: P15 Color out: S20 Mark of burning: O Temperature: H	Rim: 103 Neck:- Body:403 Base: 202
00155	A	A006	E06	-	T.p.9	G	Rim diameter: 14 cm Base diameter:- Height: - Status: rim Comparison:	Firing: SO Color in: P6 Color out: S1 Mark of burning: SO Temperature: H	Rim: 119 Neck:- Body:- Base: -
00347	A	A027	E27	-	T.p.9	G	Rim diameter: 22 cm Base diameter:- Height: - Status: rim Comparison: Khirbat Khattuniyah (Curtis - Reade 1995, fig. 53, 314)	Firing: M Color in: P12 Color out: S13 Mark of burning: O Temperature: H	Rim: 108 Neck:- Body:- Base: -

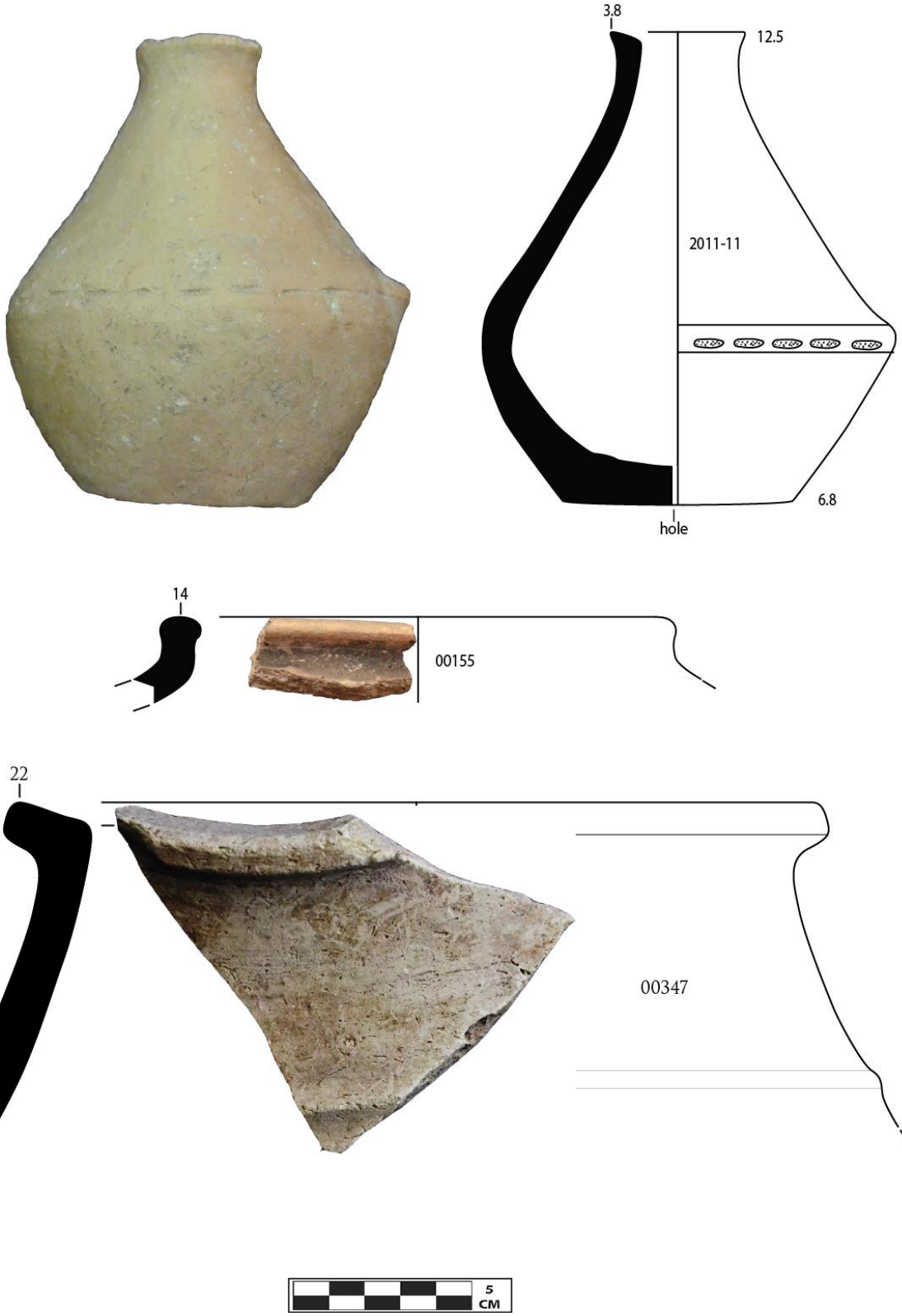

3.8
12.5
2011-11
6.8
hole
14
00155
22
00347
5
CM

Plate 49 jars with concave neck

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
00219	A	A013	E13	-	T.p.9	G	Rim diameter: 18 cm Base diameter:- Height: - Status: rim Comparison:	Firing: M Color in: P22 Color out: S13 Mark of burning: O Temperature: H	Rim: 106 Neck:- Body:- Base: -
00546	A	A046	E46	-	T.p.7	E	Rim diameter: 13 Base diameter: Height: Status: rim Comparison:	Firing: F Color in: P17 Color out: S9 Mark of burning: O Temperature: H	Rim: 101 Neck:- Body:- Base:
00603	A	A067	E67	-	T.p.3	A3	Rim diameter: 18 cm Base diameter:- Height: - Status: rim Comparison: Harran Plain (Coşkun, N. 2016, fig. 8:8)	Firing: M Color in: P13 Color out: S9 Mark of burning: O Temperature: H	Rim: 106 Neck:- Body:- Base: -
00618	A	A067	E67	-	T.p.7	E	Rim diameter: 14 cm Base diameter:- Height: - Status: rim Comparison: Tall Šēh Hamad (Kreppner, 2006, Taf 29.4)	Firing: SU Color in: P12 Color out: S13 Mark of burning: O Temperature: H	Rim: 106 Neck:- Body:- Base: -
00625	C	C038	E38	-	T.p.7	E	Rim diameter: 12 cm Base diameter:- Height: - Status: rim Comparison: Tall Šēh Hamad (Kreppner, 2006, Taf 30.20)	Firing: M Color in: P9 Color out: S9 Mark of burning: O Temperature: H	Rim: 106 Neck:- Body:- Base: -
00512	C	C045	E45	-	T.p.10	H	Rim diameter: 12 cm Base diameter:- Height: - Status: rim Comparison:	Firing: M Color in: P15 Color out: S14 Mark of burning: O Temperature: H	Rim: 106 Neck:- Body:- Base: -
00040	A	A001	E01	-	T.p.7	E	Rim diameter: 10 cm Base diameter:- Height: - Status: rim Comparison: Sharqat (Haller 1954, Taf. 3f)	Firing: SU Color in: P7 Color out: S7 Mark of burning: O Temperature: H	Rim: 120 Neck:- Body:- Base: -
00549	A	A044	E44	-	T.p.7	E	Rim diameter: 6 Base diameter: Height: Status: rim Comparison:	Firing: F Color in: P12 Color out: S13 Mark of burning: O Temperature: H	Rim: 120 Neck:- Body:- Base:

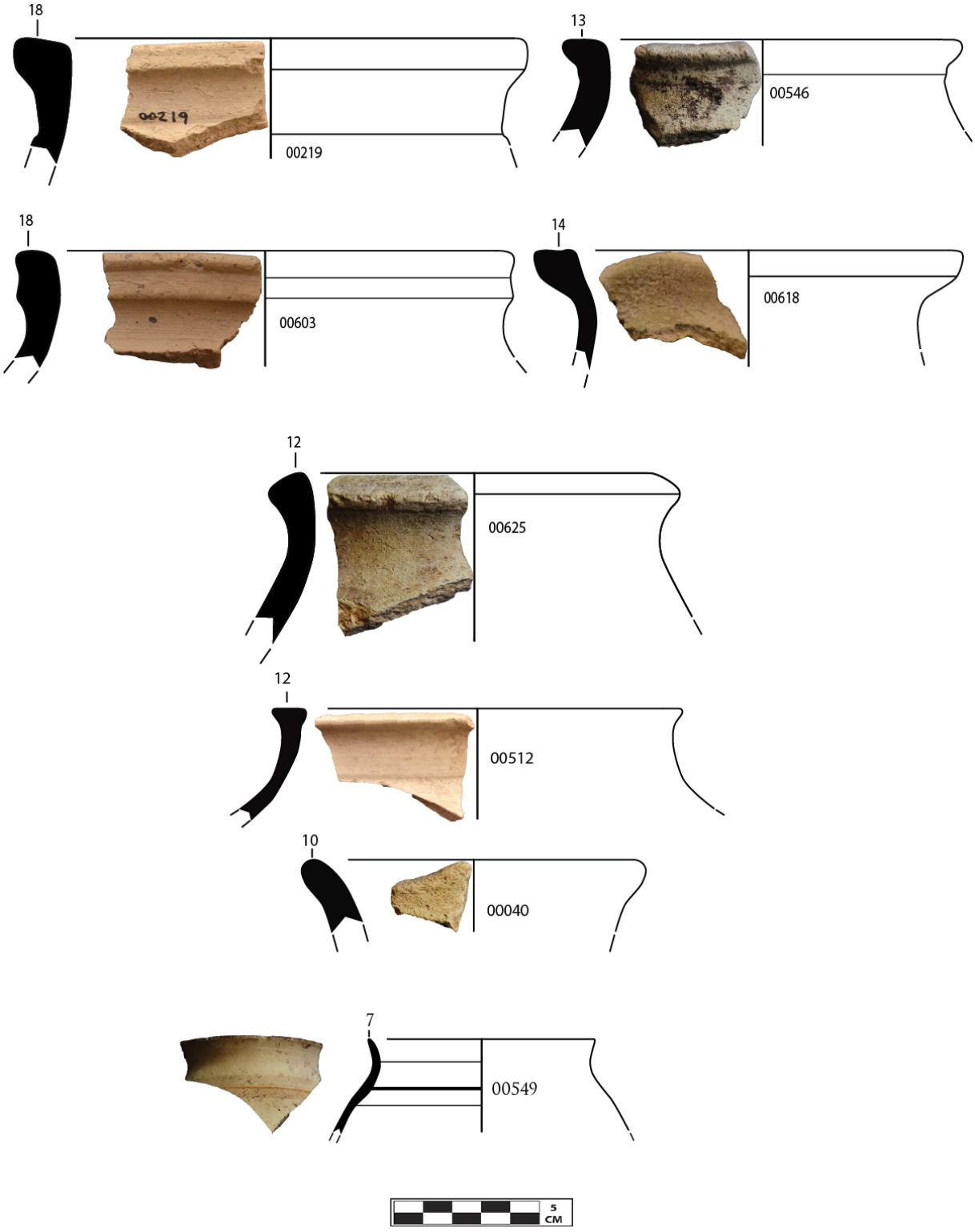

18
00219
00219
13
00546
18
00603
14
00618
12
00625
12
00512
10
00040
7
00549
5
CM

Plate 50 jars with concave neck

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
00216	A	A013	E13	-	T.p.9	G	Rim diameter: 18 cm Base diameter:- Height: - Status: rim Comparison:	Firing: M Color in: P22 Color out: S7 Mark of burning: O Temperature: H	Rim: 1114 Neck:- Body:- Base: -
00552	A	A055	E55	-	T.p.4	B	Rim diameter: 16 cm Base diameter:- Height: - Status: rim Comparison:	Firing: M Color in: P20 Color out: S19 Mark of burning: O Temperature: H	Rim: 114 Neck:- Body:- Base: -
00801	A	A082	E82	-	T.p.7	E	Rim diameter: 8 cm Base diameter:- Height: - Status: rim Comparison: Tell Mughier (Altaweel. M, 2006, p.158, fig. 3-6)	Firing: SU Color in: P24 Color out: S25 Mark of burning: O Temperature: H	Rim: 114 Neck:- Body:- Base: -
2012-89	L7	1	1	1	T.p.7	E	Rim diameter: 10.5 cm Base diameter:- Height: - Status: rim Comparison: Tell Samir (Altaweel. M, 2006, p.179, fig. 31-10)	Firing: SU Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: 107 Neck:- Body:- Base: -
2012-95	L7	-	-	I	T.p.7	E	Rim diameter: 10 cm Base diameter:- Height: - Status: rim Comparison: Tell Sheik Hamsd (Krepnner 2006, taf 118-3)	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: 107 Neck:- Body:- Base: -
00059	A	A001	E38	-	T.p.7	E	Rim diameter: 8 cm Base diameter:- Height: - Status: rim Comparison:	Firing: M Color in: P7 Color out: S8 Mark of burning: O Temperature: H	Rim: 105 Neck:- Body:- Base: -
2012-135	L7	-	-	I	T.p.3	A3	Rim diameter: 10 cm Base diameter:- Height: - Status: rim Comparison:	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: 105 Neck:- Body:- Base: -

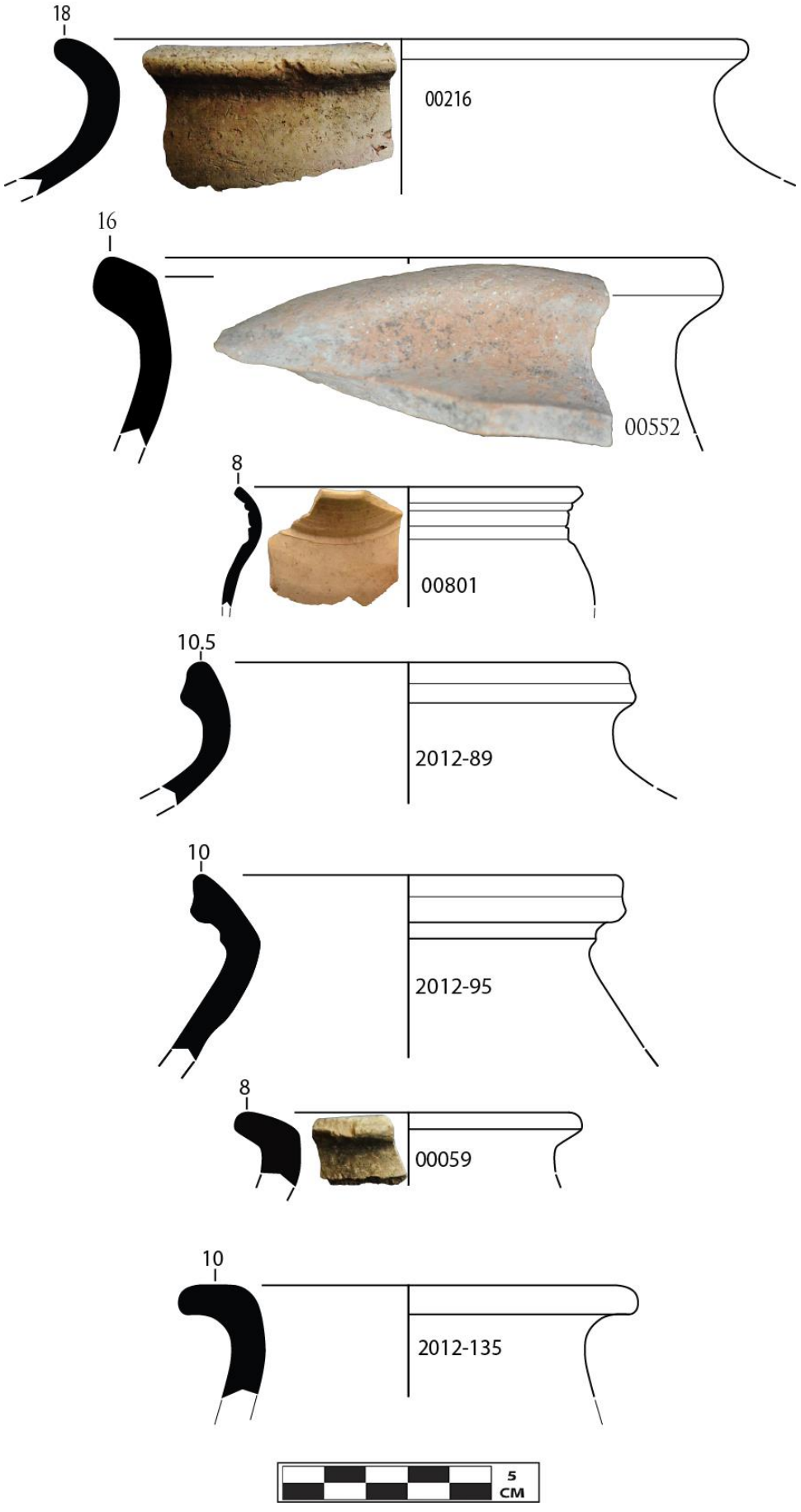

18
00216
16
00552
8
00801
10.5
2012-89
10
2012-95
8
00059
10
2012-135
5
CM

Plate 51 jars with concave neck

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
00655	C	C066	E66	-	T.p.7	E	Rim diameter: 14 cm Base diameter:- Height: - Status: rim Comparison: Karkamish (Bonomo – Federrico, 2014, fig.6: 10)	Firing: M Color in: P17 Color out: S16 Mark of burning: O Temperature: H	Rim: 101 Neck:- Body:- Base: -
2012-131	L7	-	-	I	T.p.3	A3	Rim diameter: 8cm Base diameter: Height: Status: rim Comparison: Bistansur, (Cooper (2012, fig. 18-16), Tell Dor (Giboa 2006, F.1.6.-11)	Firing: M Color in: P23 Color out: S22 Mark of burning: O Temperature: H	Rim: 107 Neck:- Body:- Base: -
2012-138	L7	-	-	I	T.p.10	H	Rim diameter: 11cm Base diameter: Height: Status: rim Comparison: Tell al-Sheid (Altaweel. M, 2006, p. 167, fig.14.5)	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: 117 Neck:- Body:- Base: -
2012-83	L7	1	1	1	T.p.9	G	Rim diameter: 10 cm Base diameter:- Height: - Status: rim Comparison: Ziyaret Tepe (Matney - Alii 2007, fig. 19d)	Firing: SU Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: 108 Neck:- Body:- Base: -
2012-143	L7	1	1	1	T.p.7	A3	Rim diameter: 13 cm Base diameter:- Height: - Status: rim Comparison:	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: 108 Neck:- Body:- Base: -
2012-144	L7	-	-	I	T.p.3	A3	Rim diameter: 18 cm Base diameter:- Height: - Status: rim Comparison: Kopik Höyük (Algaze, 2012 ,fig.26-3)	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: 108 Neck:- Body:- Base: -
2012-142	L7	-	-	I	T.p.2	A2	Rim diameter: 20 cm Base diameter:- Height: - Status: rim Comparison: Bistansur (Cooper 2012, fig. 18-17) Tell Dor, Giboa 2006, F.1.6.-11)	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: 112 Neck:- Body:- Base: -

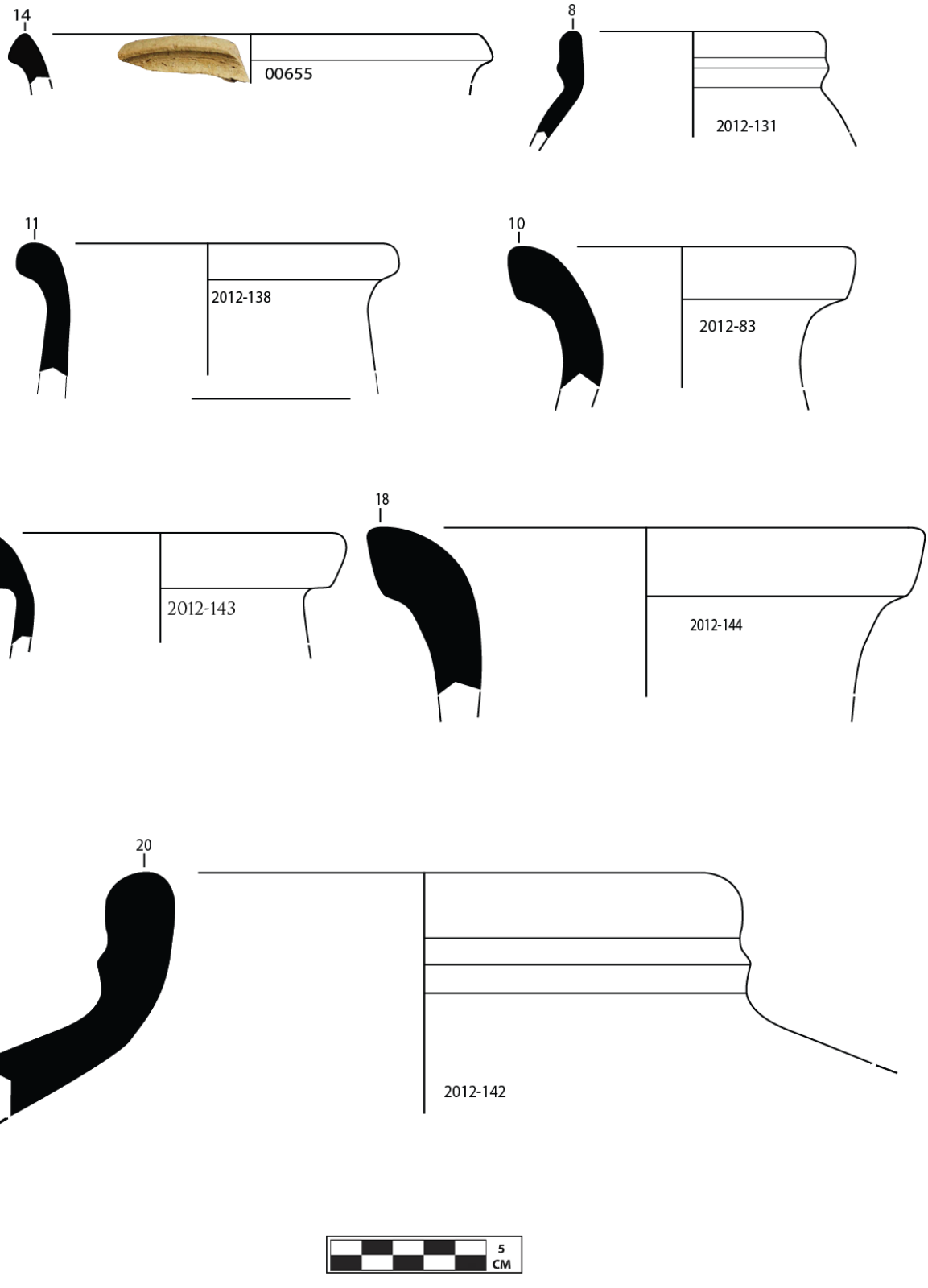
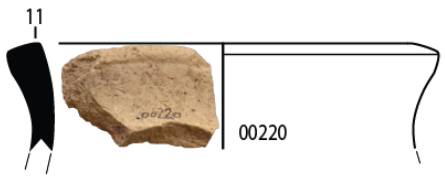

14
00655
8
2012-131
11
2012-138
10
2012-83
13
2012-143
18
2012-144
20
2012-142
5
CM

Plate 52 jars with concave neck

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
00220	A	A013	E13	-	T.p.3	A3	Rim diameter: 11 cm Base diameter:- Height: - Status: rim Comparison: Tall Šēh Hamad (Kreppner, 2006, Taf 102.2)	Firing: M Color in: P24 Color out: S22 Mark of burning: O Temperature: H	Rim: 101 Neck:- Body:- Base: -
00403	A	A013	E13	-	T.p.3	A3	Rim diameter: 14 cm Base diameter:- Height: - Status: rim Comparison: Karkamish (Bonomo – Federrico, 2014, fig.4: 12)	Firing: M Color in: P24 Color out: S22 Mark of burning: O Temperature: H	Rim: 101 Neck:- Body:- Base: -
00404	A	A082	E82	-	T.p.3	A3	Rim diameter: 13 cm Base diameter:- Height: - Status: rim Comparison: Tall Šēh Hamad (Kreppner, 2006, Taf 56.9)	Firing: M Color in: P24 Color out: S22 Mark of burning: O Temperature: H	Rim: 101 Neck:- Body:- Base: -
00641	C	C068	E68	-	T.p.7	E	Rim diameter: 16 cm Base diameter:- Height: - Status: rim Comparison:	Firing: M Color in: P23 Color out: S16 Mark of burning: O Temperature: H	Rim: 101 Neck:- Body:- Base: -
00800	A	A082	E82	-	T.p.2	A2	Rim diameter: 10 cm Base diameter:- Height: - Status: rim Comparison: Khirbet al-Qasr (Altaweel. M, 2006, p. 166, fig.13.3)	Firing: M Color in: P3 Color out: S20 Mark of burning: O Temperature: H	Rim: 101 Neck:- Body:- Base: -
00032	A	A001	E01	-	T.p.7	E	Rim diameter: 12 cm Base diameter:- Height: - Status: rim Comparison: Tall Šēh Hamad (Kreppner, 2006, Taf 115.5)	Firing: M Color in: P7 Color out: S7 Mark of burning: O Temperature: H	Rim: 103 Neck:- Body:- Base: -
00223	A	C013	E13	-	T.p.7	E	Rim diameter: 14 cm Base diameter:- Height: - Status: rim Comparison: Tall Šēh Hamad (Kreppner, 2006, Taf 105.6)	Firing: M Color in: P19 Color out: S22 Mark of burning: O Temperature: H	Rim: 103 Neck:- Body:- Base: -
00647	C	C046	E46	-	T.p.5	C	Rim diameter: 16 cm Base diameter:- Height: - Status: rim Comparison: Karkamish (Bonomo – Federrico, 2014, fig.6: 4)	Firing: M Color in: P25 Color out: S23 Mark of burning: O Temperature: H	Rim: 103 Neck:- Body:- Base: -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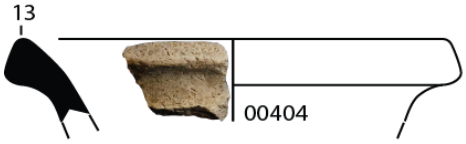
00220


14
00403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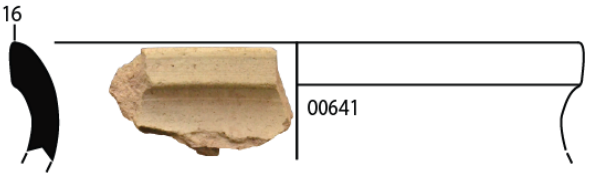
00404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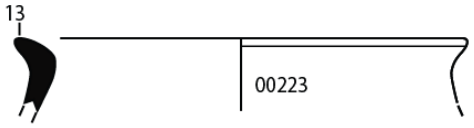
00641


10
00800


12
00032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00223


16
00647


5
CM

Plate 53 jars with concave and concave haring neck

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
00052	A	A001	E01	-	T.p.9	G	Rim diameter: 12 cm Base diameter:- Height: - Status: rim Comparison: Tall Šēh Hamad (Kreppner, 2006, Taf 111.4)	Firing: M Color in: P7 Color out: S7 Mark of burning: O Temperature: H	Rim: 100 Neck:- Body:- Base: -
00559	A	A044	E44	-	T.p.9	G	Rim diameter: 10 Base diameter: Height: Status: rim Comparison: Tall Šēh Hamad (Kreppner, 2006, Taf 111.5)	Firing: M Color in: P15 Color out: S14 Mark of burning: O Temperature: H	Rim: 100 Neck:- Body:- Base:
00585	A	A078	E78	-	T.p.10	H	Rim diameter: 12.5 cm Base diameter:- Height: - Status: rim Comparison:	Firing: M Color in: P9 Color out: S9 Mark of burning: O Temperature: H	Rim: 100 Neck:- Body:- Base: -
2012-147	L.7	-	-	I	T.p.3	A3	Rim diameter: 13 cm Base diameter:- Height: - Status: rim Comparison: Khirbat Khatuniyah, Curtis - Green 1997, fig.43, 196.	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: 100 Neck:- Body:- Base: -
00646	C	C046	E46	-	T.p.2	A2	Rim diameter: 28 cm Base diameter:- Height: - Status: rim Comparison:	Firing: SO Color in: P20 Color out: S19 Mark of burning: SO Temperature: L	Rim: 103 Neck:303 Body:- Base: -
00665	C	C066	E66	-	T.p.7	E	Rim diameter: 18 cm Base diameter:- Height: - Status: rim Comparison: Karkamish (Bonomo – Federrico, 2014, fig.8: 2)	Firing: M Color in: P17 Color out: S16 Mark of burning: O Temperature: H	Rim: 107 Neck:- Body:- Base: -

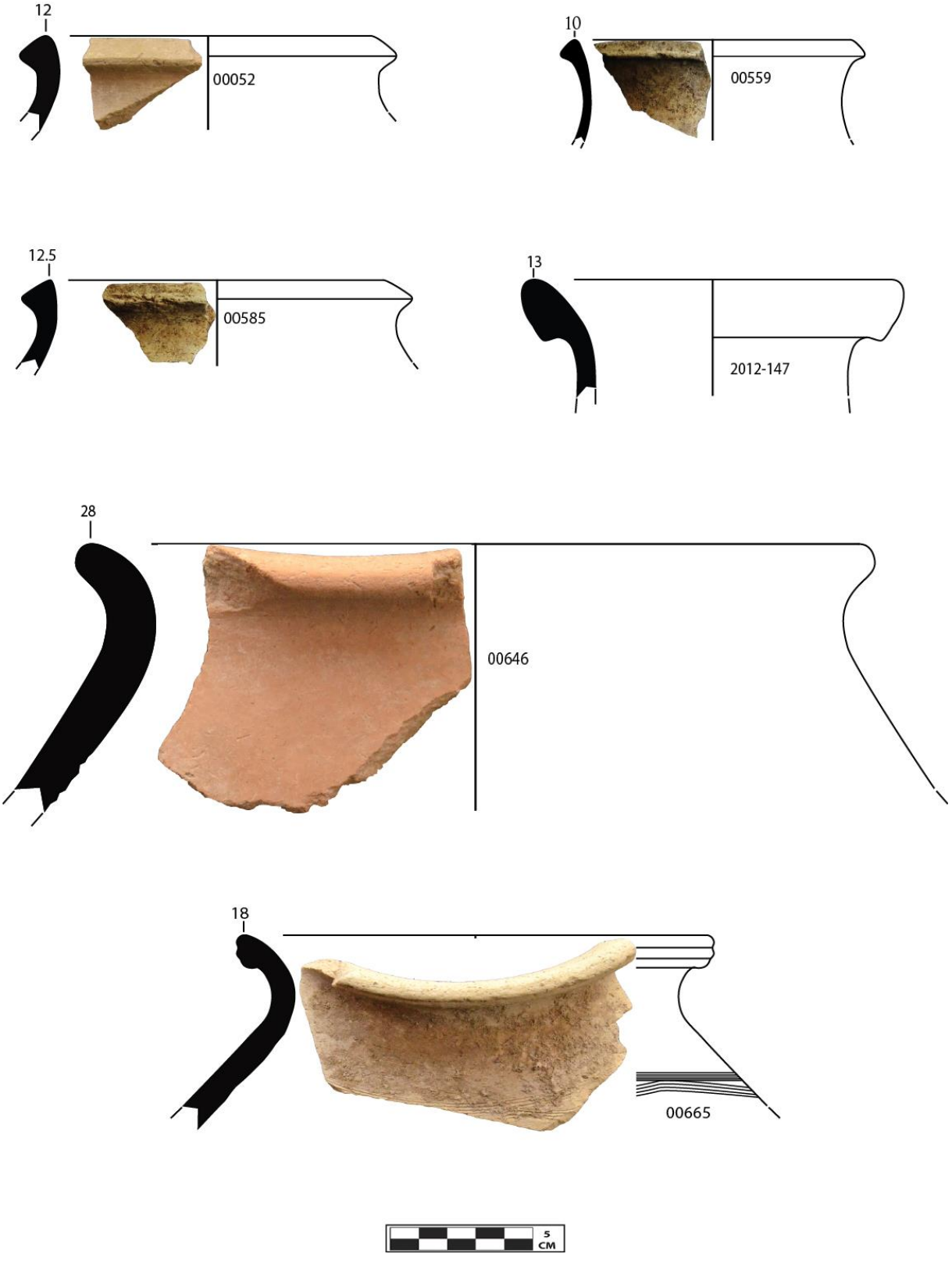

12
00052
10
00559
12.5
00585
13
2012-147
28
00646
18
00665
5
CM

Plate 54 jars with conical neck

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
00150	A	A006	E06	-	T.p.9	G	Rim diameter: 13 cm Base diameter:- Height: - Status: rim comparison :	Firing: M Color in: P7 Color out: S7 Mark of burning: O Temperature: H	Rim: 105 Neck:- Body:- Base: -
00570-00562	L7	-	-	I	T.p.3	A3	Rim diameter: 18 cm Base diameter:- Height: - Status: rim Comparison: Tall Šēh Hamad (Kreppner, 2006, Taf 111.6)	Firing: SU Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: 108 Neck:- Body:- Base: -
00564	A	A018	E18	-	T.p.10	H	Rim diameter: 17 cm Base diameter:- Height: - Status: rim Comparison:	Firing: M Color in: P17 Color out: S9 Mark of burning: O Temperature: H	Rim: 105 Neck:- Body:- Base: -
00600	A	A067	E67	-	T.p.10	H	Rim diameter: 22 cm Base diameter:- Height: - Status: rim Comparison:	Firing: SU Color in: P24 Color out: S9 Mark of burning: O Temperature: H	Rim: 105 Neck:- Body:- Base: -
00581	A	A031	E31	-	T.p.10	H	Rim diameter: 13 cm Base diameter:- Height: - Status: rim Comparison:	Firing: O Color in: P9 Color out: S9 Mark of burning: SO Temperature: H	Rim: 106 Neck:- Body:- Base: -
2012-84	L7	-	-	2	T.p.9	G	Rim diameter: 14 cm Base diameter:- Height: - Status: rim Comparison:	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: 106 Neck:- Body:- Base: -
2012-145	L7	-	-	1	T.p.3	A3	Rim diameter: 11 cm Base diameter:- Height: - Status: rim Comparison:	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: 117 Neck:- Body:- Base: -

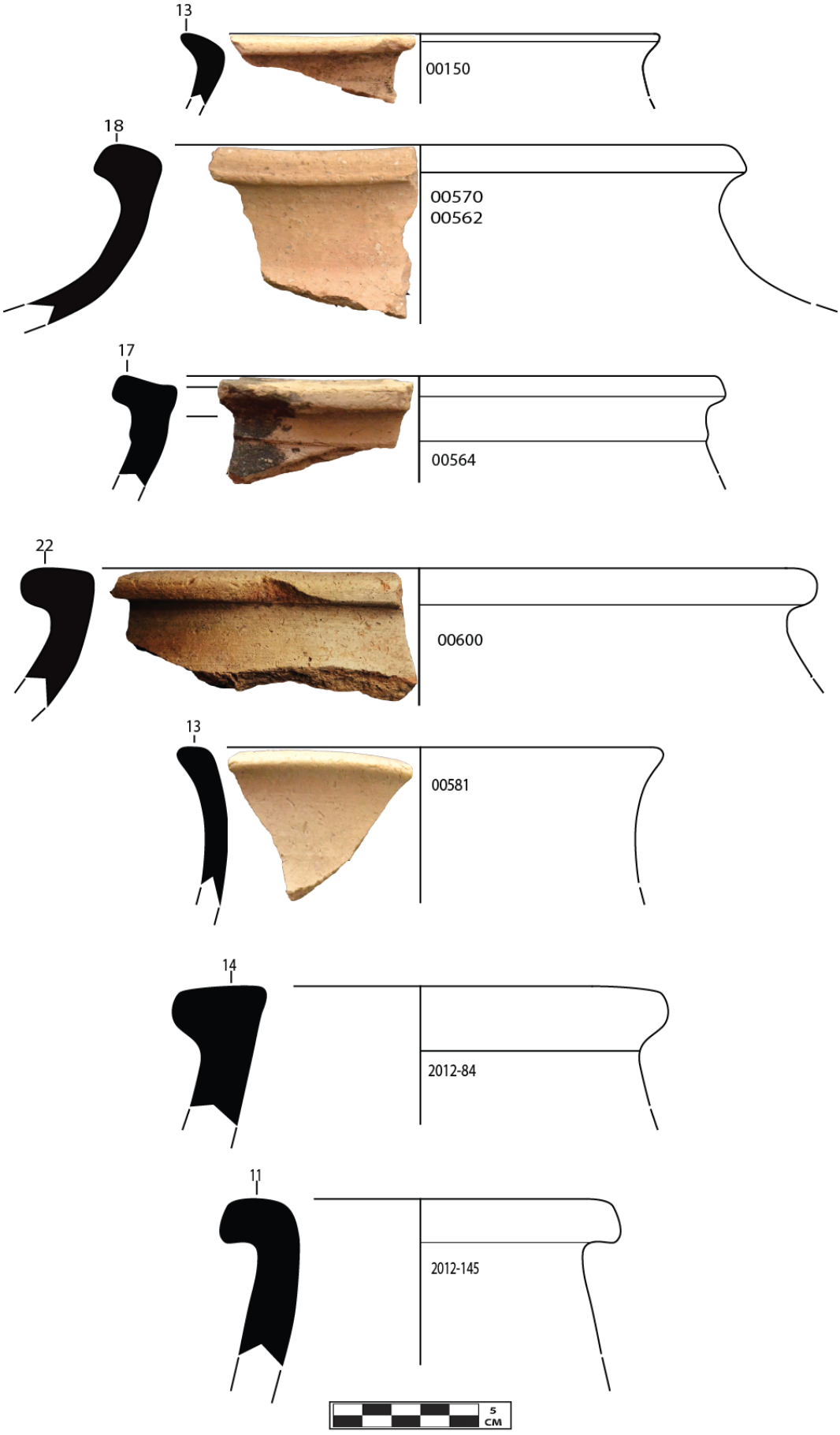

13
00150
18
00570
00562
17
00564
22
00600
13
00581
14
2012-84
11
2012-145
5
CM

Plate 55 jars with cylindrical neck

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
00578	A	A031	E31	-	T.p.10	H	Rim diameter: 20 cm Base diameter:- Height: - Status: rim Comparison:	Firing: M Color in: P9 Color out: S9 Mark of burning: O Temperature: H	Rim: 105 Neck:- Body:- Base: -
00583	A	A078	E78	-	T.p.10	H	Rim diameter: 18 cm Base diameter:- Height: - Status: rim Comparison: Tall Šēh Hamad (Kreppner, 2006, Taf 115.10)	Firing: SO Color in: P17 Color out: S9 Mark of burning: O Temperature: H	Rim: 105 Neck:- Body:- Base: -
00399	A	A027	E27	-	T.p.10	H	Rim diameter: 12 cm Base diameter:- Height: - Status: rim Comparison: Khirbat Khatuniyah, (Curtis - Green 1997, fig.40, 177)	Firing: M Color in: P24 Color out: S22 Mark of burning: O Temperature: H	Rim: 108 Neck:- Body:- Base: -
00454	A	A046	E46	-	T.p.10	H	Rim diameter: 18 cm Base diameter:- Height: - Status: rim Comparison: Tell Bestansur (Sabr 2012, fig.2-12)	Firing: M Color in: P17 Color out: S16 Mark of burning: O Temperature: H	Rim: 106 Neck:- Body:- Base: -
00080	A	A001	E01	-	T.p.7	E	Rim diameter: 18 cm Base diameter:- Height: - Status: rim Comparison: Tall Šēh Hamad (Kreppner, 2006, Taf 56.12)	Firing: O Color in: P22 Color out: S20 Mark of burning: O Temperature: H	Rim: 106 Neck:- Body:- Base: -

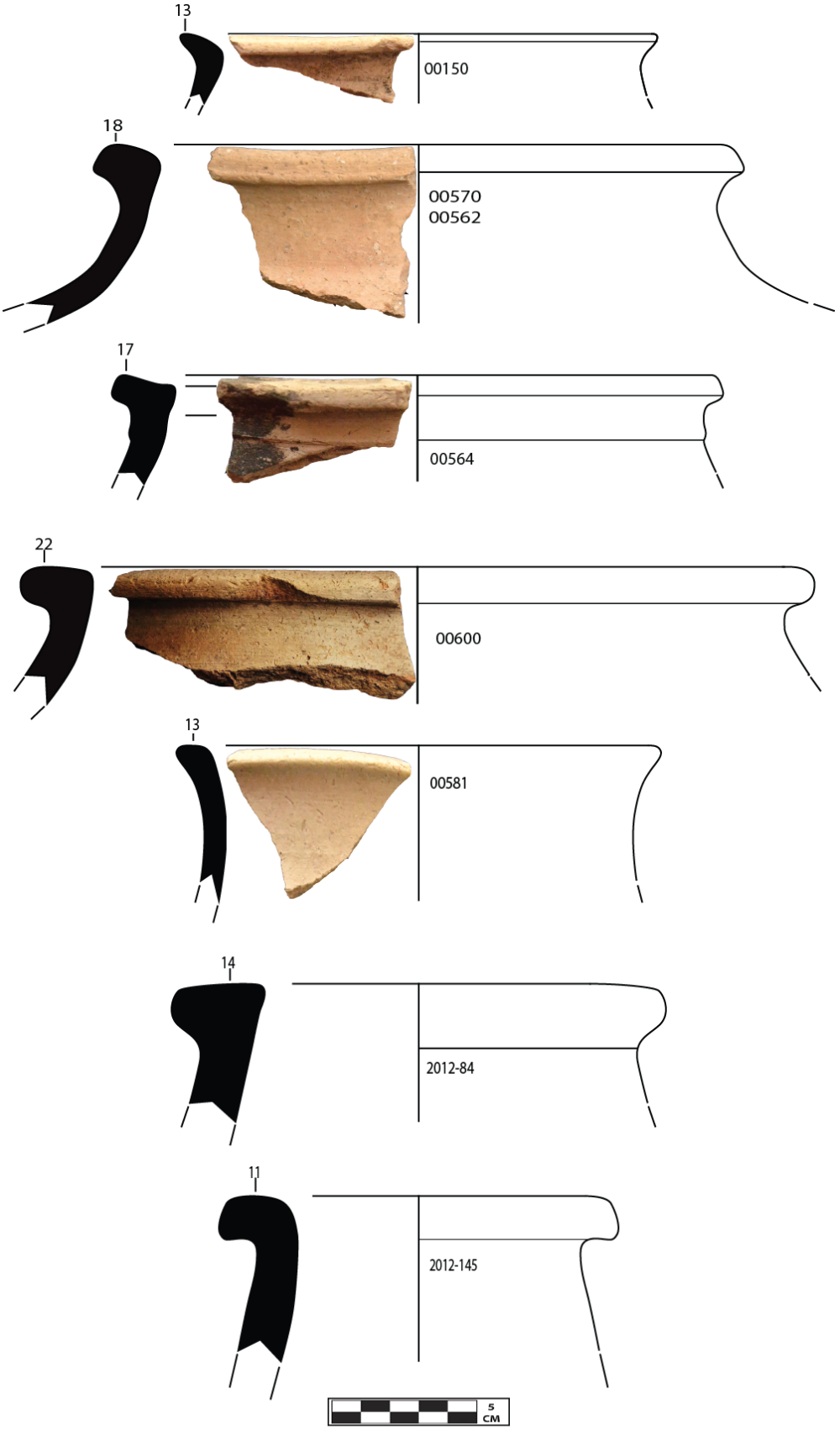
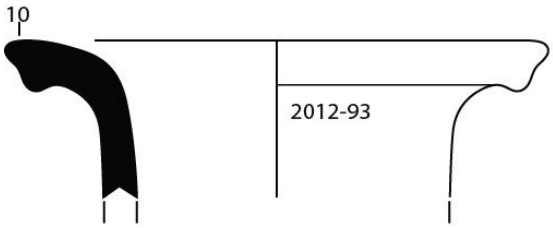

13
00150
18
00570
00562
17
00564
22
00600
13
00581
14
2012-84
11
2012-145
5
CM

Plate 56 jars with cylindrical neck

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
2012-93	L7	-	-		T.p.9	G	Rim diameter: 10 cm Base diameter:- Height: - Status: rim Comparison:	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: 107 Neck:- Body:- Base: -
2012-136	L7	-	-	1	T.p.9	G	Rim diameter: 11 cm Base diameter:- Height: - Status: rim Comparison:	Firing: SO Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: 110 Neck:- Body:- Base: -
2012-140	L7	-	-	1	T.p.10	H	Rim diameter: 10 cm Base diameter:- Height: - Status: rim Comparison: Tall Šēh Hamad (Kreppner, 2006, Taf 56.3)	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: 103 Neck:- Body:- Base: -
2013-10	J6	-	-	1	T.p.10	H	Rim diameter: 10 cm Base diameter:1cm Height: 13 Status: complete Comparison: Tall Halaf (Hrouda 1962, Taf. 60, 134)	Firing: SU Color in: P24 Color out: S22 Mark of burning: O Temperature: H	Rim: 107 Neck:301 Body:403 Base: 207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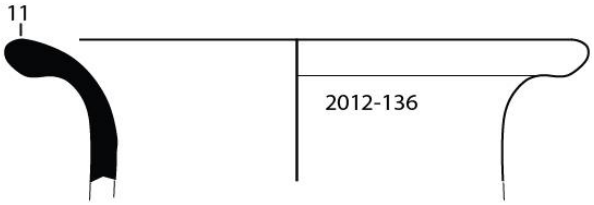
2012-93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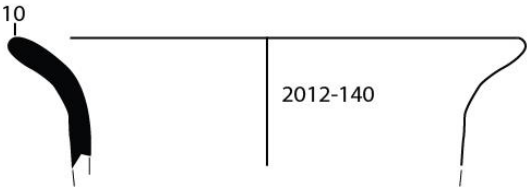
2012-136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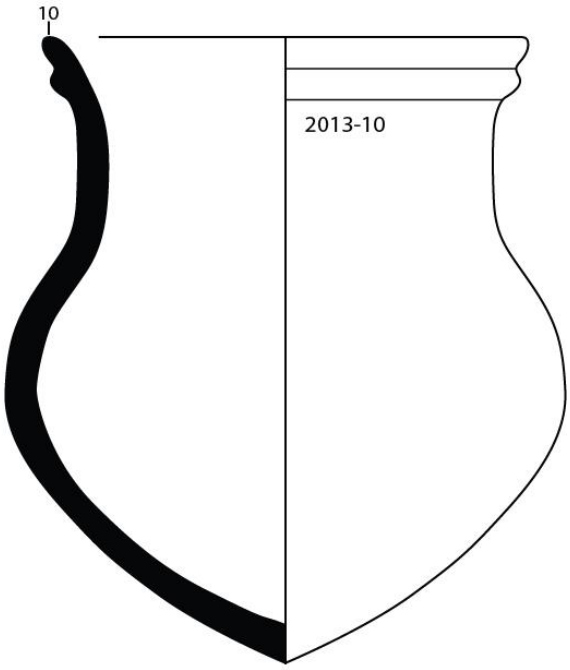
2012-140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2013-10


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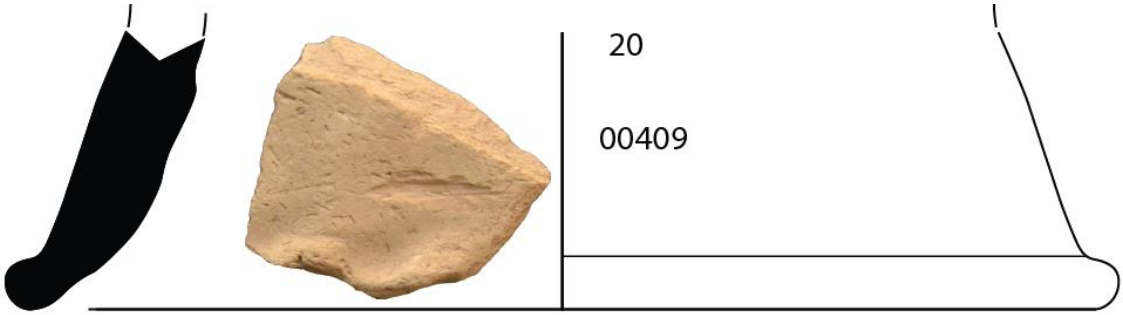
CM

Plate 57 pot stand with concave wall

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
00409	L7	-	-		T.p.3	A3	Rim diameter: - Base diameter: 20cm Height: - Status: base Comparison:	Firing: M Color in: P14 Color out: S14 Mark of burning: O Temperature: H	Rim: Neck:- Body:- Base: 114
00607	L7	-	-	1	T.p.9	G	Rim diameter: - Base diameter:18cm Height: - Status: base Comparison:	Firing: SO Color in: P3 Color out: S22 Mark of burning: O Temperature: M	Rim: - Neck:- Body:- Base: 114
2011-81	M7	-	-	II	T.p.10	H	Rim diameter: 16 cm Base diameter:18.5 Height: 19 Status: complete Comparison:	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: 101 Neck:- Body:- Base: 114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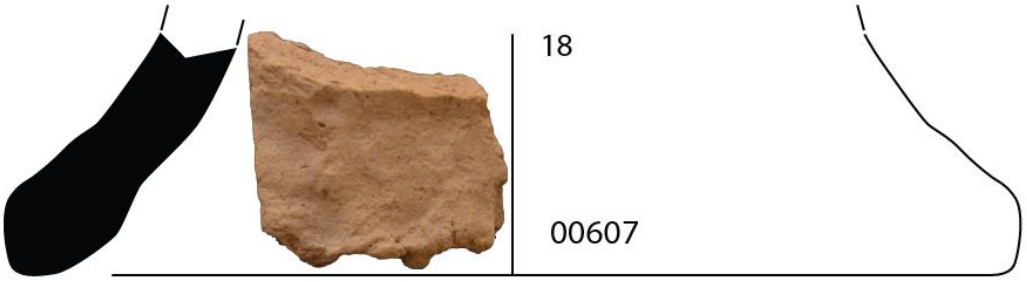
00409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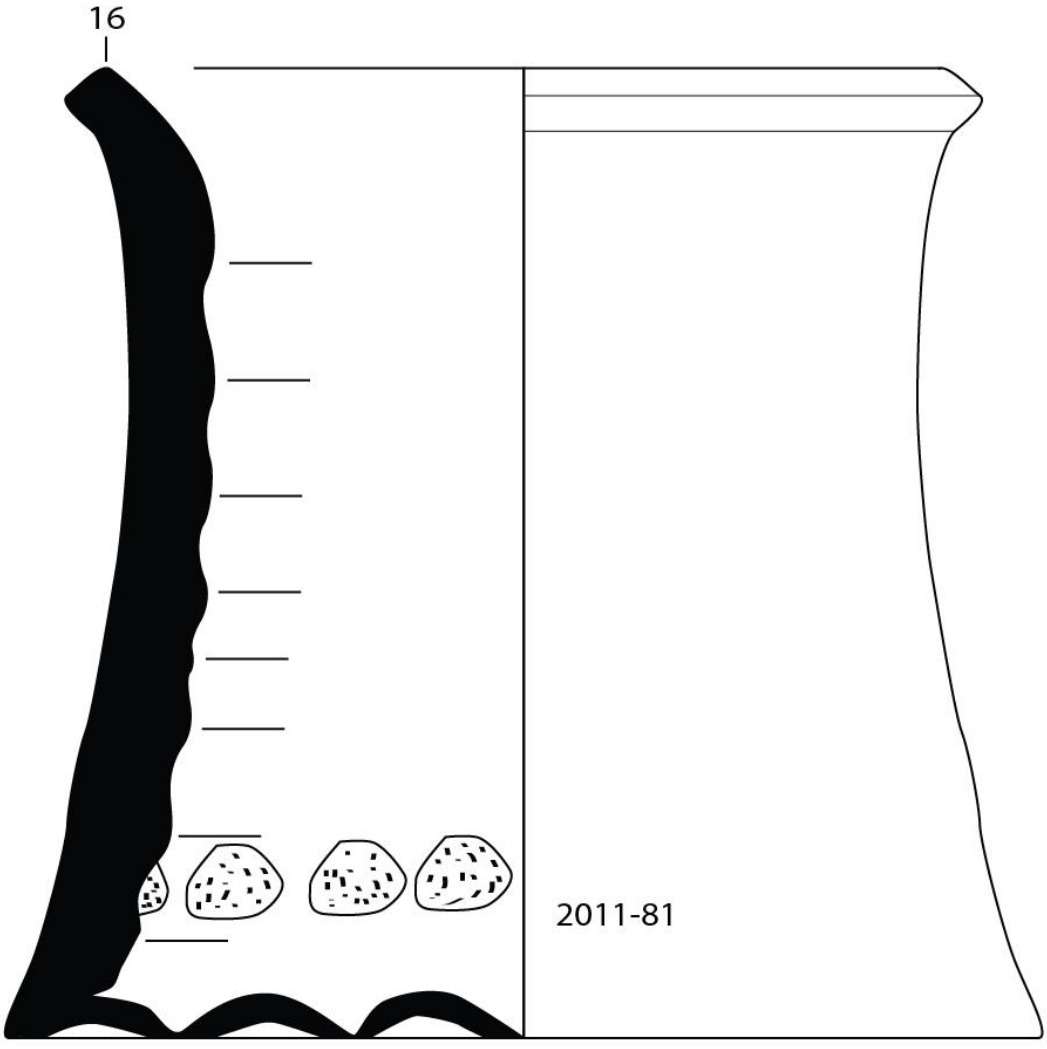
00607

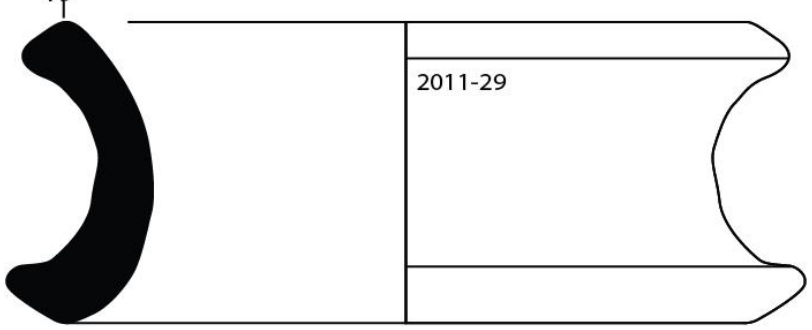

16
2011-81


5
CM

Plate 58 pots stand with concave and flaring walls

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
2011-29	M7	-	-	II	T.p.3	A3	Rim diameter: 19cm Base diameter: 20cm Height: 9cm Status: complete Comparison: Nimrud (Oates, 1959, pl.39, 113	Firing: M Color in: P17 Color out: S22 Mark of burning: O Temperature: H	Rim: 101 Neck:- Body:- Base: 102
2010-1a	O13	-	-	1I	T.p.9	G	Rim diameter: 16cm Base diameter:18cm Height: 13 Status: complete Comparison:	Firing: SO Color in: P22 Color out: S20 Mark of burning: O Temperature: M	Rim: 100 Neck:- Body:- Base: 105

19



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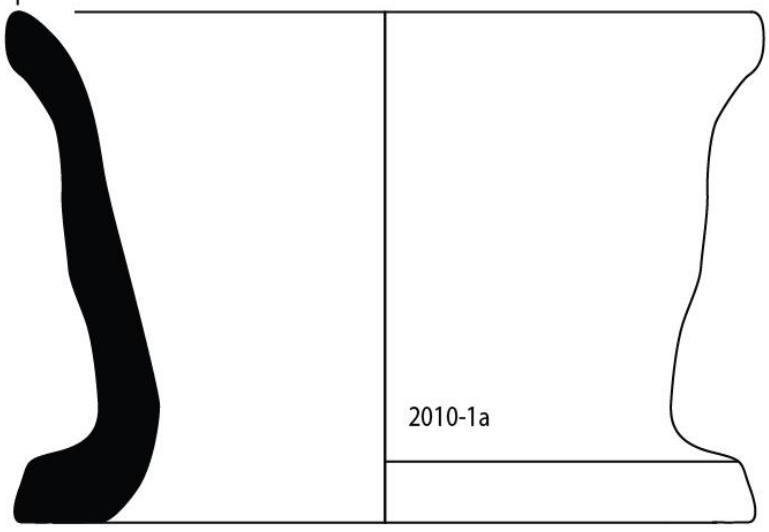
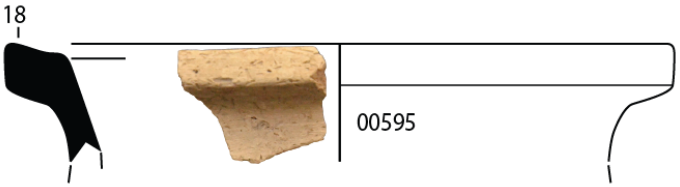


Plate 59 pot stand with concave wall

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
00584	A	A078	E78	-	T.p.3	A3	Rim diameter: - Base diameter: 16cm Height: - Status: base Comparison:	Firing: M Color in: P17 Color out: S9 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: 118
00598	A	A067	E67	-	T.p.9	G	Rim diameter: - Base diameter:31cm Height: - Status: base Comparison:	Firing: M Color in: P23 Color out: S9 Mark of burning: O Temperature: M	Rim: - Neck:- Body:- Base: 119
00595	A	A041	E41	-	T.p.3	A3	Rim diameter: 20cm Base diameter: - Height: - Status: base Comparison:	Firing: M Color in: P17 Color out: S9 Mark of burning: SO Temperature: M	Rim: 108 Neck:- Body:- Base: -


16
00584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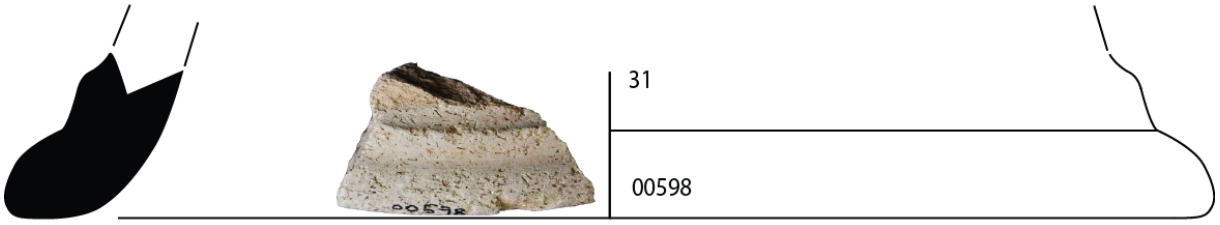

31
00598


5
CM

Plate 60 Body sherds

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
00100	L7	-	-	I	T.p.9	G	Rim diameter: - Base diameter: - Height: - Status: Body sherd Comparison:	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: -
2012-119	L7	-	-	I	T.p.10	H	Rim diameter: - Base diameter:- Height: - Status: Body sherd Comparison:	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: M	Rim: - Neck:- Body:- Base: -
00150	L7	-	-	I	T.p.3	A3	Rim diameter: - Base diameter: - Height: - Status: Body sherd Comparison:	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: M	Rim: - Neck:- Body:- Base: -
2012-118	L7	-	-	I	T.p.3	A3	Rim diameter: - Base diameter: - Height: - Status: Body sherd Comparison:	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: -
2012-125	L7	-	-	I	T.p.3	A3	Rim diameter: - Base diameter: - Height: - Status: Body sherd Comparison:	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: -
00605	A	A067	E67	-	T.p.10	H	Rim diameter: - Base diameter: - Height: - Status: Body sherd Comparison:	Firing: M Color in: P9 Color out: S9 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: -
2012-120	L7	-	-	I	T.p.3	A3	Rim diameter: - Base diameter: - Height: - Status: Body sherd Comparison:	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: -
2012-108	L7	-	-	I	T.p.3	A3	Rim diameter: - Base diameter: - Height: - Status: Body sherd Comparison:	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: -
2012-122	L7	-	-	I	T.p.9	G	Rim diameter: - Base diameter: - Height: - Status: Body sherd Comparison:	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: -
2012-121	L7	-	-	I	T.p.3	A3	Rim diameter: - Base diameter: - Height: - Status: Body sherd Comparison:	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: -

2012-117	L7	-	-	I	T.p.10	H	Rim diameter: - Base diameter: - Height: - Status: Body sherd Comparison:	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: -

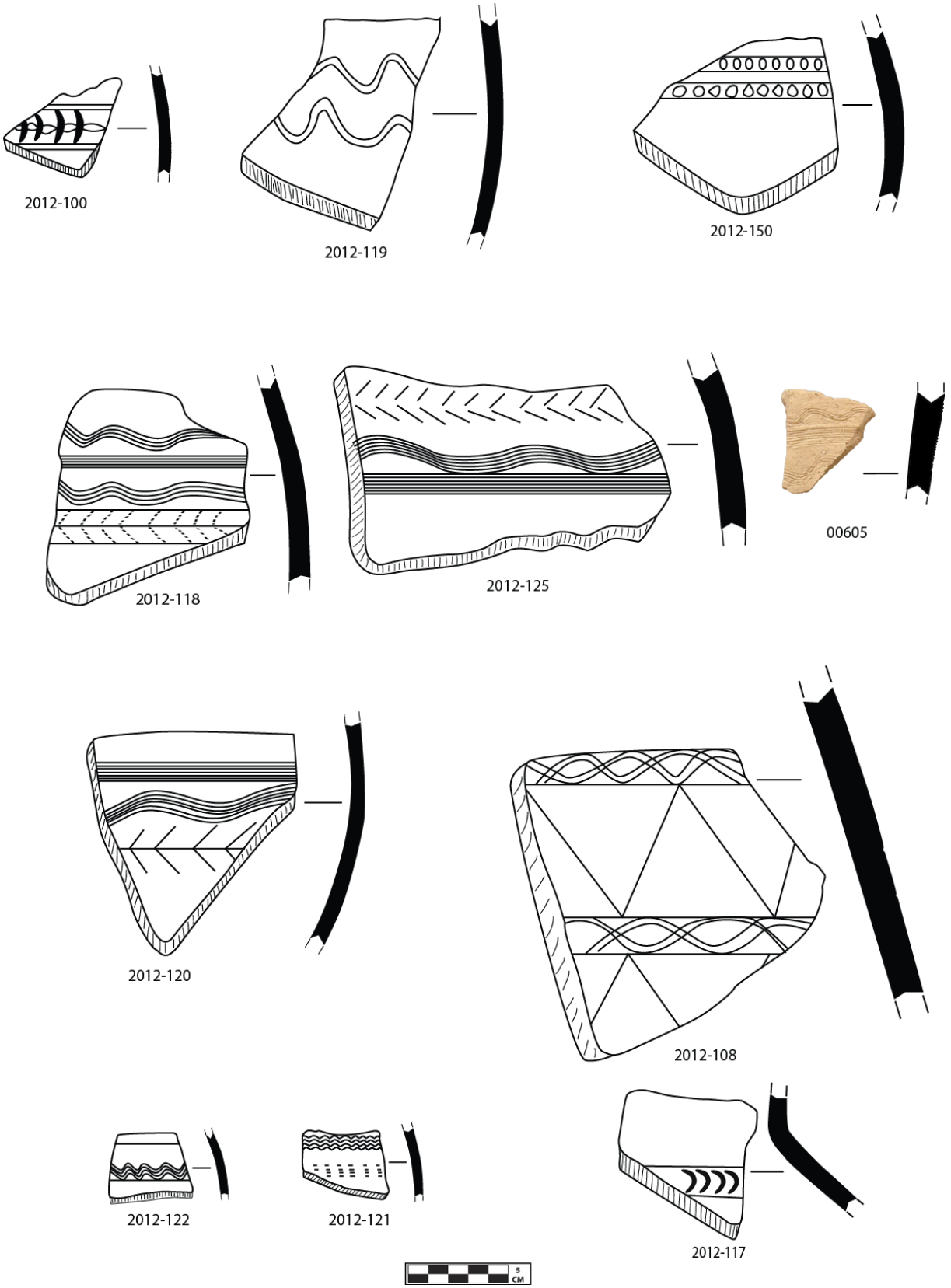
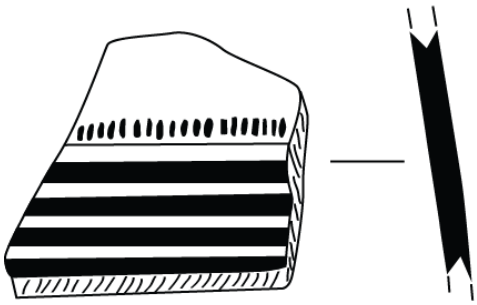
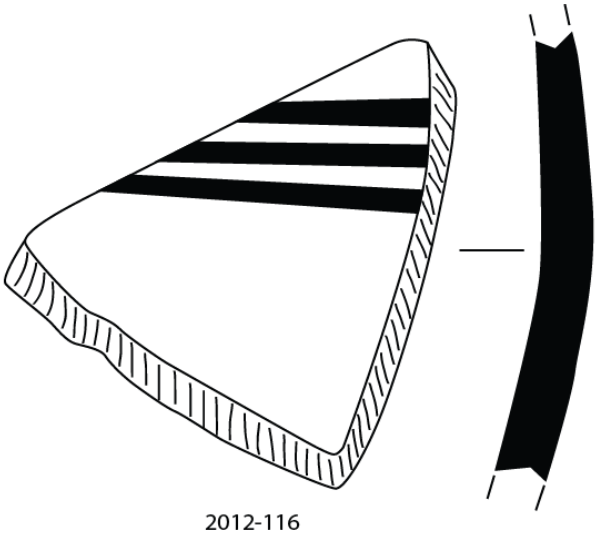

2012-100
2012-119
2012-150
2012-118
2012-125
00605
2012-120
2012-108
2012-122
2012-121
2012-117
5 CM

Plate 61 body sherds

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
2012-98	L7	-	-	I	T.p.9	G	Rim diameter: - Base diameter: - Height: - Status: Body sherd Comparison:	Firing: SU Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: -
2012-116	L7	-	-	I	T.p.10	H	Rim diameter: - Base diameter:- Height: - Status: Body sherd Comparison:	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: M	Rim: - Neck:- Body:- Base: -
2012-123	L7	-	-	I	T.p.10	H	Rim diameter: - Base diameter: - Height: - Status: Body sherd Comparison:	Firing: SU Color in: P23 Color out: S21 Mark of burning: O Temperature: M	Rim: - Neck:- Body:- Base: -
2012-124	L7	-	-	I	T.p.3	A3	Rim diameter: - Base diameter: - Height: - Status: Body sherd Comparison:	Firing: SU Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: -
2010-1B-3	O13	-	-	II	T.p.9	G	Rim diameter: - Base diameter: - Height: - Status: Body sherd Comparison:	Firing: M Color in: P24 Color out: S12 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: -
00022	A	A001	E01	-	T.p.10	H	Rim diameter: - Base diameter: - Height: - Status: Body sherd Comparison:	Firing: M Color in: P7 Color out: S7 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: -
00604	A	A67	E67	-	T.p.10	H	Rim diameter: - Base diameter: - Height: - Status: Body sherd Comparison:	Firing: M Color in: P24 Color out: S9 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: -



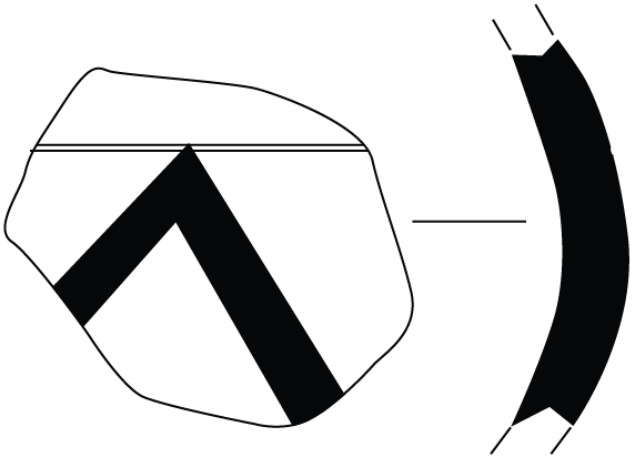
2012-98



2012-116

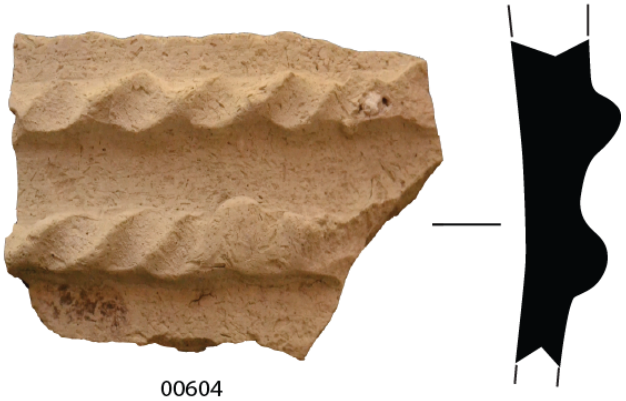
2012-123

2012-124



2010-1b-3

00022



00604

Plate 62 concave, disk, round and flattened bases

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
2012-109	L7	-	-	I	T.p.9	G	Rim diameter: 3.5 Base diameter: Height: - Status: base Comparison:	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: 201
00017	A	A001	E01	-	T.p.7	E	Rim diameter: - Base diameter: 1.4 Height: - Status: base Comparison:	Firing: M Color in: P7 Color out: S7 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: 201
2012-113	L7	-	-	I	T.p.10	H	Rim diameter: - Base diameter: 2.7 Height: - Status: base Comparison:	Firing: M Color in: P23 Color out: S22 Mark of burning: O Temperature: M	Rim: - Neck:- Body:- Base: 201
2012-112	L7	-	-	I	T.p.9	G	Rim diameter: - Base diameter: 5 Height: - Status: base Comparison:	Firing: SU Color in: P23 Color out: S22 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: 201
2012-111	L7	-	-	I	T.p.9	G	Rim diameter: - Base diameter: 2.8 Height: - Status: base Comparison:	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: 201
2012-114	L7	-	-	I	T.p.10	H	Rim diameter: - Base diameter: 5.5 Height: - Status: base Comparison:	Firing: M Color in: P23 Color out: S22 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: 202
2012-107	L7	-	-	I	T.p.10	H	Rim diameter: - Base diameter: 3 Height: - Status: base Comparison:	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: 202
2012-102	L7	-	-	I	T.p.9	G	Rim diameter: - Base diameter: 1 Height: - Status: base Comparison:	Firing: SU Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: 204
000664	C	C056	E56	-	T.p.10	H	Rim diameter: - Base diameter: 6 Height: - Status: base Comparison:	Firing: M Color in: P9 Color out: S9 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: 208

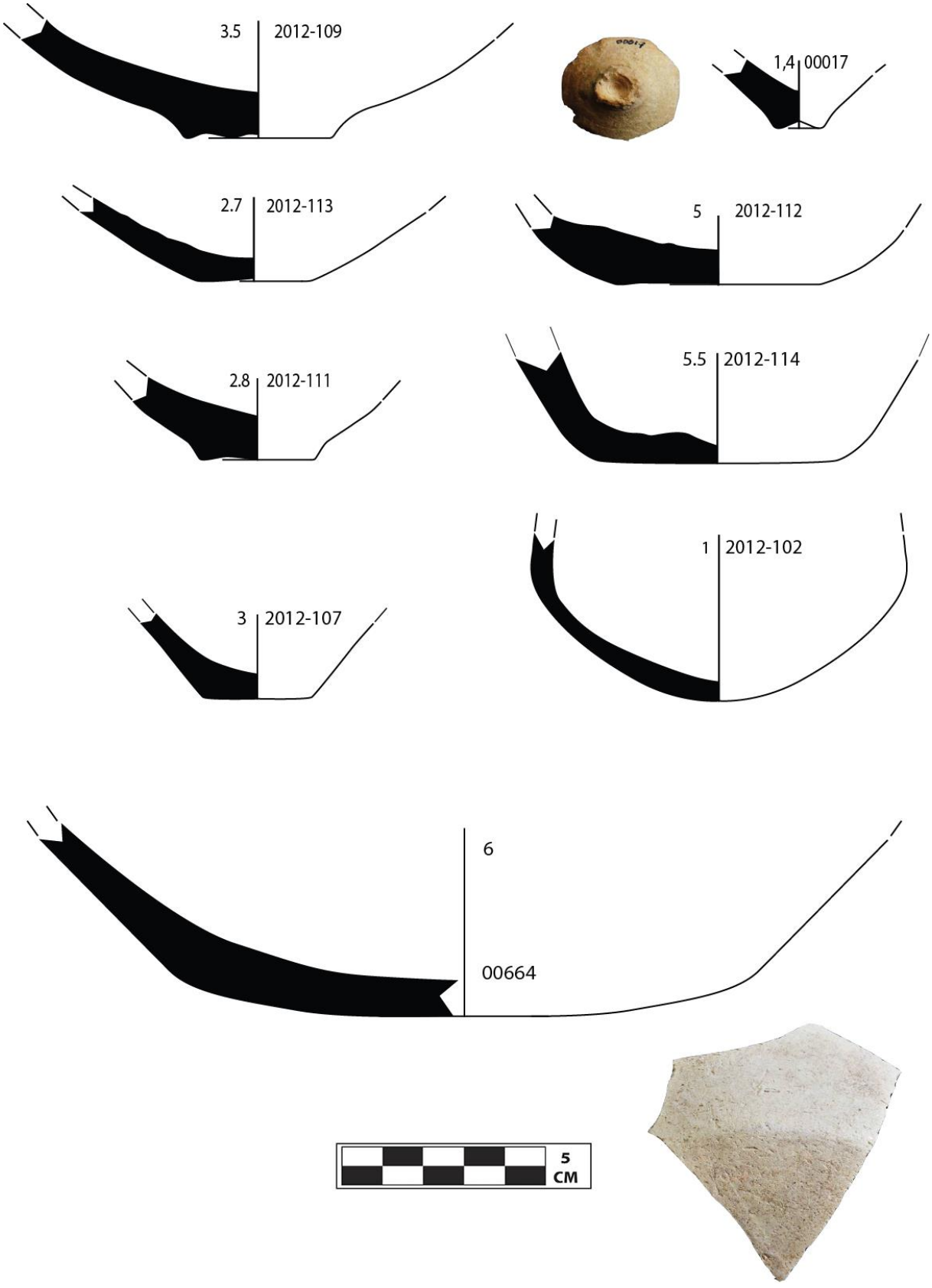

3.5
2012-109
1,4
00017
2.7
2012-113
5
2012-112
2.8
2012-111
5.5
2012-114
1
2012-102
3
2012-107
6
00664
5
CM

Plate 63 disk grooved and one knob bases

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
2012-110	L7	-	-	I	T.p.10	H	Rim diameter: 5 cm Base diameter: Height: - Status: base Comparison: Tell Hamoukar (Ur 2002, fig. 14: 17)	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: 203
2012-115	L7	-	-	I	T.p.10	H	Rim diameter: - Base diameter: 4 cm Height: - Status: base Comparison:	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: 203
2012-105	L7	-	-	I	T.p.10	H	Rim diameter: - Base diameter:8 cm Height: - Status: base Comparison:	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: M	Rim: - Neck:- Body:- Base: 203
00725	A	A075	E75	-	T.p.7	E	Rim diameter: - Base diameter: 4 cm Height: - Status: base Comparison:	Firing: M Color in: P24 Color out: S20 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: 203
00580	A	A031	E31	I	T.p.7	E	Rim diameter: - Base diameter: 10 cm Height: - Status: base Comparison:	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: 203
2010-04	O13	-	-	II	T.p.10	H	Rim diameter: - Base diameter:1.5cm Height: - Status: base Comparison: Harran Plain (Coşkun, N. 2016, fig.8:15)	Firing: SU Color in: P24 Color out: S22 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: 206
00724	A	A075	E75	-	T.p.10	H	Rim diameter: - Base diameter: 9 cm Height: - Status: base Comparison:	Firing: M Color in: P16 Color out: S22 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: 203
00217	A	A13	E13	-	T.p.7	E	Rim diameter: - Base diameter: 9cm Height: - Status: base Comparison**:**	Firing: M Color in: P4 Color out: S4 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: 203
00610	A	A67	E67	-	T.p.8	F	Rim diameter: - Base diameter:6 cm Height: - Status: base Comparison:	Firing: M Color in: P10 Color out: S10 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: 203

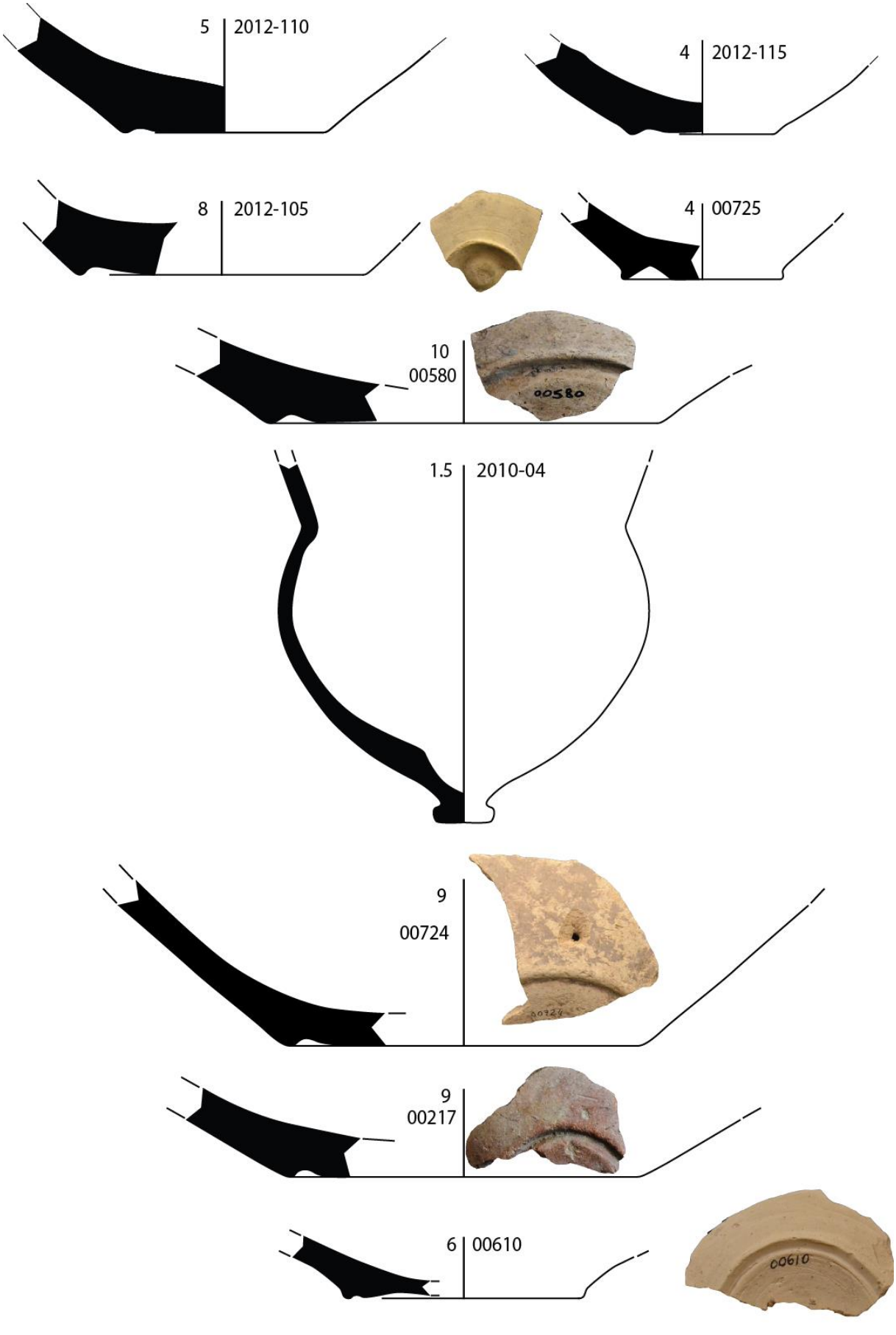

5 2012-110
4 2012-115
8 2012-105
4 00725
10
00580
00580
1.5 2010-04
9
00724
00724
9
00217
6 00610
00610
5
CM

Plate 64 ring bases

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
00002	A	A001	E01	-	T.p.10	H	Rim diameter: - Base diameter: 10 cm Height: - Status: base Comparison: Harran Plain (Coşkun, N. 2016, fig.4: 14)	Firing: M Color in: P2 Color out: S2 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: 200
00141	C	C005	E05	-	T.p.7	E	Rim diameter: - Base diameter: 4 cm Height: - Status: base Comparison:	Firing: M Color in: P22 Color out: S20 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: 200
2011-41	M7	-	-	II	T. p. 8	F	Rim diameter: - Base diameter:3.5 cm Height: 11 cm Status: non complete Comparison: Harran Plain (Coşkun, N. 2016, fig. 4:15)	Firing: SU Color in: P17 Color out: S16 Mark of burning: O Temperature: M	Rim: - Neck:- Body:- Base: 200
00003	A	A001	E01	-	T.p.2	A2	Rim diameter: - Base diameter: 12 cm Height: - Status: base Comparison:	Firing: M Color in: P22 Color out: S19 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: 200
00029	A	A001	E01	-	T.p.10	H	Rim diameter: - Base diameter: 12 cm Height: - Status: base Comparison:	Firing: M Color in: P7 Color out: S7 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: 200

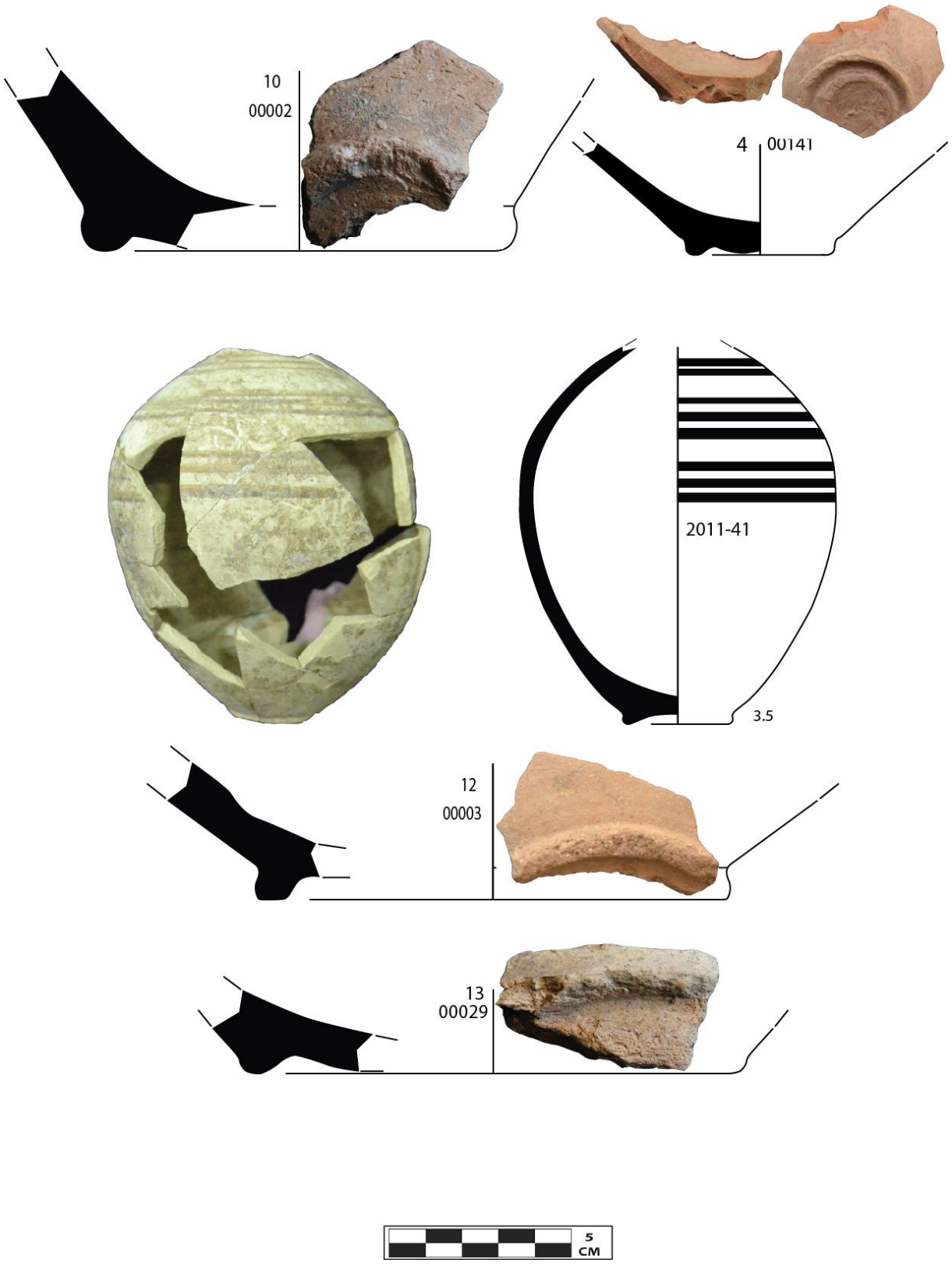
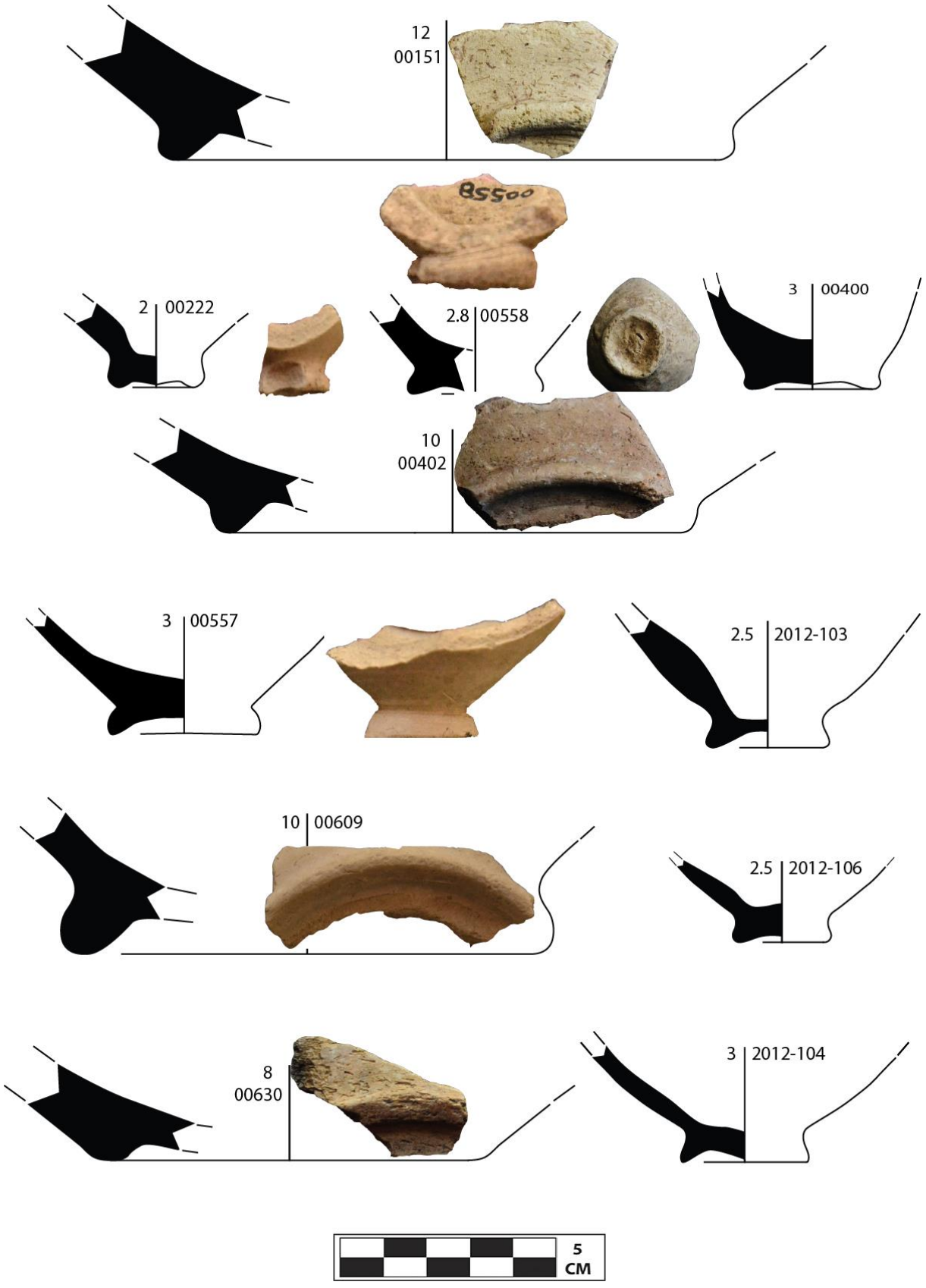

10
00002
4
00141
2011-41
3.5
12
00003
13
00029
5
CM

Plate 65 ring bases

Figure No	Square	Locus	Lot	Level	Technic pottery	Ware group	Dimension and comparison	Ware and Remarks	Typology of shapes
00151	A	A006	E06	-	T.p.10	H	Rim diameter: - Base diameter: 12 cm Height: - Status: base Comparison:	Firing: M Color in: P7 Color out: S7 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: 200
00222	A	A013	E13	-	T.p.10	H	Rim diameter: - Base diameter: 2 cm Height: - Status: base Comparison:	Firing: M Color in: P24 Color out: S22 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: 200
00558	A	A044	E44	-	T. p. 10	H	Rim diameter: - Base diameter:2.8 cm Height: - Status: base Comparison: Tell Hamoukar (Ur 2002, fig. 14: 19)	Firing: M Color in: P9 Color out: S9 Mark of burning: O Temperature: M	Rim: - Neck:- Body:- Base: 200
00400	A	A027	E27	-	T.p.10	H	Rim diameter: - Base diameter: 3 cm Height: - Status: base Comparison:	Firing: M Color in: P24 Color out: S22 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: 200
00402	A	A027	E27	-	T.p.10	H	Rim diameter: - Base diameter: 10 cm Height: - Status: base Comparison: Tell Hamoukar (Ur 2002, fig. 14: 18)	Firing: M Color in: P24 Color out: S22 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: 200
00557	A	A044	E44	-	T.p.10	H	Rim diameter: - Base diameter: 3 cm Height: - Status: base Comparison:	Firing: M Color in: P9 Color out: S9 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: 200
2012-106	L7	-	-	I	T. p. 10	H	Rim diameter: - Base diameter: 2.5 cm Height: 11 cm Status: non complete Comparison:	Firing: SU Color in: P23 Color out: S21 Mark of burning: O Temperature: M	Rim: - Neck:- Body:- Base: 200
2012-103	L7	-	-	I	T. p. 10	H	Rim diameter: - Base diameter: 2.5 cm Height: 11 cm Status: non complete Comparison:	Firing: M Color in: P23 Color out: S21 Mark of burning: O Temperature: M	Rim: - Neck:- Body:- Base: 200
00609	A	A067	E67	-	T.p.10	H	Rim diameter: - Base diameter: 10 cm Height: - Status: base Comparison:	Firing: M Color in: P15 Color out: S14 Mark of burning: O Temperature: H	Rim: - Neck:- Body:- Base: 200
00630	C	C038	E38	-	T.p.10	H	Rim diameter: - Base diameter: 8 cm Height: - Status: base	Firing: M Color in: P2 Color out: S19 Mark of burning: O	Rim: - Neck:- Body:- Base: 200

							Comparison: Harran Plain (Coşkun, N. 2016, fig. 4:13)	Temperature: H	
2012-104	L7	-	-	I	T. p. 10	H	Rim diameter: - Base diameter: 3 cm Height: - Status: - Comparison:	Firing: SU Color in: P23 Color out: S21 Mark of burning: O Temperature: M	Rim: - Neck:- Body:- Base: 200


12
00151
85500
2
00222
2.8
00558
3
00400
10
00402
3
00557
2.5
2012-103
10
00609
2.5
2012-106
8
00630
3
2012-104
5
CM